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American Vocational Association

NEWS BULLETIN

VOLUME VI NUMBER III

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American Vocational Association
NEWS BULLETIN

VOL. VI AUGUST 1931 NO. III

PUBLISHED QUARTERLY BY THE AMERICAN VOCATIONAL ASSOCIATION

THE COMMITTEE ON PUBLICATIONS

R. W. GREGORY, CHAIRMAN
ROOM 225 STATE HOUSE

ADDRESS COMMUNICATIONS PERTAINING TO ADVERTISING to STUDIO PRESS, *Publishers* 340 Century Bldg. Indianapolis

Z. M. SMITH, SECRETARY
INDIANAPOLIS, INDIANA

ANNUAL SUBSCRIPTION PRICE TO MEMBERS OF THE ASSOCIATION, TWENTY-FIVE CENTS

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THE PRESIDENT'S MESSAGE

CHARLES M. MILLER, *President of the American Vocational Association, Topeka, Kansas*

Every State Director of Vocational Education in the country has probably received a copy of "From No-Man's Land to Leadership", which is the Report of the Survey Committee on Franklin Union. Dr. Charles R. Mann, director American Council on Education is chairman of this survey committee.

This report is indeed interesting to any person who is engaged in the development of a program of Public Vocational Education, for it makes a strong case for Vocational Education as can well be made. It is interesting to note that chart No. 1, page 4 of the report, is very similar to Dr. Cooley's chart which appears on page 73 of the "Report of the Hearing on the Capper-Reid Bill before the House Committee on Education."

The situation with respect to the need for Vocational Education over the entire country is probably not very different from the situation within reach of Franklin Union. The interesting thing to those engaged in the development of a program of Public Vocational Education is that this committee should so strongly indorse the type of education which is carried on at Franklin Union.

The report quotes from President Hoover's Inaugural Address as follows: "As our numbers increase and as our life expands with science and invention, we must discover more and more leaders from every walk of life. We cannot hope to succeed in directing this increasingly complex civilization unless we can draw all the talent of leadership from the whole people.

"One civilization after another has been wrecked upon the attempt to secure sufficient leadership from a single group or class . . . We must draw constantly from the general mass. The full opportunity for every boy and girl to rise through the selective processes of education can alone secure to us this leadership."

The committee continues: "Clearly the important task before this nation is to discover more and more ways for leaders to rise from every walk of life. We must discover ways to give boys and girls full opportunity to realize in action the potential leadership that is within them. We repeat once more that we consider this the outstanding CHALLENGE TO AMERICA."

And concludes that: "Clearly one way of meeting the challenge of our times is to develop the powers of technical institutes like Franklin Union. Any community that does this thereby renders a national service of significance.

"In conclusion, after more than two years of study of Franklin Union, we express once more admiration for the kind of work it carries on, and give full endorsement to its expansion. We regard an enlarged Franklin Union as a practical necessity for the industrial welfare of New England. But more important, it is an indispensable instrument for liberating the creative capacities of youth."

Among the very splendid reasons this committee gives for reccommending that Education of the Franklin Union type be encouraged is the "Growth of Mechanical Power."

I quote again from the report: "The United States has always been a pioneer in the use of power. Fifty years ago one-half horse-power per inhabitant was sufficient to give us great advantage not only over all earlier civilizations, but also over European nations. Today it has grown to astonishing proportions We now have seven and a half horse-power for every man, woman, and child, and this power is increasing four times as fast as is population.

"Seven and a half horse-power per individual sounds harmless. But since one horse-power equals twenty-four man-power, this means that the American people now have in mechanical power the equivalent of 20,000,000,000 mechanical slaves—eleven times the total population of the earth. Furthermore, the number of these "Cast-iron Slaves" is increasing at the rate of more than one billion per year.

"With this increase in motive power goes an ever more bewildering increase in the social mechanism by which our day differs from the boyhood days of John D. Long. This measurable energy in power creates intangible forces in the complicated machinery of social organism. It is to all of these forces, both tangible and intangible, that we refer when we ask: "Are Cast-Iron Slaves a Danger?"

"The social value of such stupendous power clearly depends upon the wisdom with which it is directed. On the one hand, mechanical production may destroy initiative, individuality, and personality. But, on the other, it may do just the reverse. It may be a most beneficial influence, removing poverty, increasing health and comfort, and giving enlarged opportunities for culture and growth."

Helping the millions of men and women and boys and girls in our Educational "No-Man's-Land" to adjust themselves to this rapid changing situation is a challenge to every educational agency of the country. It is a special challenge to the A. V. A. whose membership believes that "Education and Labor can be satisfactorily combined."

Continued on Page 2

OFFICERS OF AMERICAN VOCATIONAL ASSOCIATION

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THE NEWS BULLETIN

Published by The American Vocational Association

R. W. Gregory, Editor
Room 225, State House
Indianapolis, Ind.

Z. M. Smith, Business Manager
Room 225, State House
Indianapolis, Ind.

Sixth Annual Convention American Vocational Association Inc.

NEW YORK CITY

December 9, 10, 11, 12, 1931

Headquarters—HOTEL PENNSYLVANIA

GENERAL SESSIONS

Wednesday evening, December 9
1. One speaker.
2. Get together, get acquainted.
3. Dancing.

Thursday evening, December 10
1. Banquet and dance.

Friday afternoon, December 11
1. Business session.
2. "THE SHIP" prize awards. (The SHIP will not put on an entertainment at this time, but will cooperate with New York and New York City in putting on the Wednesday and Thursday evening programs).

Friday evening, December 11
1. Two or three speakers representing
   a. Agriculture.
   b. Labor.
   c. Commerce.

SECTION MEETINGS

Thursday forenoon and afternoon
1. Agriculture.
2. Home Economics.
3. Industry.
4. Commerce.

The programs for these four general section meetings will be arranged for by Dr. L. A. Wilson with the cooperation of the respective vice presidents of the A. V. A.,—namely Ray Fife, Margaret Edwards, Wesley A. O'Leary and Regina Groves.

The general theme of these *eight* meetings will be "Social and economic trends in America." The speakers will be outstanding representatives actively engaged in the vocations in these respective fields.

Friday forenoon and Saturday forenoon
Section and sub-section meetings.
1. Agriculture.
2. Trade and Industry.
3. Home Economics.
4. Commerce.
5. Civilian Rehabilitation.
6. Vocational Guidance.
7. Part-time.

Each of the vice presidents will be responsible for the program for their respective sections and sub-sections for both Friday forenoon and Saturday forenoon.

The theme of these sections and subsection meetings will be "What is vocational education doing to prepare wage earners to adjust themselves effectively to the social and economic trends in America as portrayed by the speakers in the general section meetings for Thursday?"

The President's Message

Continued from Page 1

It is somewhat difficult to give a report on Legislation. It must be admitted that the prospect of securing additional legislation is not particularly bright. But at the same time, the members of the Legislative Committee, with whom I have communicated frequently, feel that we can not do otherwise than go forward with an aggressive legislative campaign. We feel that Vocational Education is, and should continue to be, a permanent institution. It was not an emergency measure when the original Smith-Hughes Law was enacted. We are not particularly interested in emergency legislation affecting Vocational Education at this time. We want to go forward on a permanent basis. Please be assured that your committee is attempting to keep in touch with the situation, as it rapidly changes. Your committee desires to keep itself in a position to take advantage of any favorable situation which may develop, and at the same time, will attempt to avoid entering into any emergency alliances which might later prove embarrassing. I mention this, for the reason that, in times like these, many relief measures will be proposed when Congress convenes. And in times of stress, people sometimes tend to stampede. While Vocational Education must be flexible, it cannot afford to be stampeded.

Arrangements for the New York Convention are progressing satisfactorily. A large number of distinguished people have agreed to serve on the General Convention Committee. Elsewhere in this issue, will appear interesting facts concerning New York City and convention arrangements. The 1931 Convention should be a great one. We have every confidence that it will not be a disappointment. We are hoping for a large attendance from across the country.

We are still hopeful that we may have a large increase in membership of every kind. A special membership committee is at work. We hope for a splendid response to their efforts. Readers of the "Bulletin" can help by just talking "Vocational Education" and telling people about the American Vocational Association.

Dr. L. A. Wilson has developed very ambitious plans for securing Life Memberships in New York. He and his committee have set one hundred Life Memberships as their minimum. They are asking New York City to contribute half of these memberships, and the up-state crowd the other half. This creates some competition. It makes a contest out of it. This arrangement should produce results, and it is a challenge to the rest of the country.

In times of stress such as these, every activity which is carried on by public funds is subject to the most searching criticism. Vocational Education must justify itself or fail of support. Indications are that it is justifying itself in most places. But let us not be satisfied with present accomplishments . . . Let us keep the goal a few paces ahead.

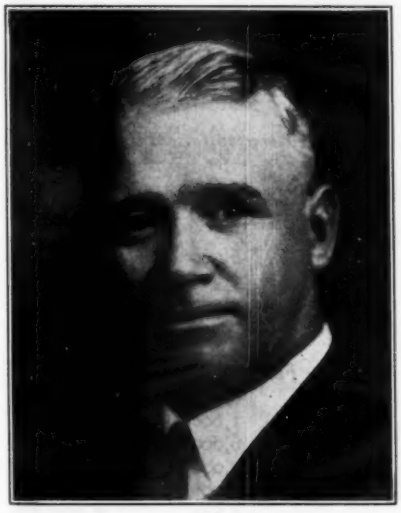
We have 10,622 members

The Publications Committee

Z. M. SMITH,
Secretary, State Director of Vocational Education, Indianapolis, Ind.

E. E. SHELDON,
Advisor to Training Department, R. R. Donnelley & Sons, Chicago, Ill.

The Publications Committee of the American Vocational Association is made up of the President, Secretary and Treasurer of the Association and two "lay members". It is the responsibility of this committee to pass upon and to authorize all publications of the A. V. A. Chief among these tasks is that of getting out this quarterly news bulletin which goes to each of the 10,617 members. In addition this committee has supervised the publishing of seven official bulletins of the association. The News Bulletin is printed at the plant of The Studio Press in Indianapolis under the terms of a five year contract. The other publications are let separately. Professor R. W. Gregory of the Education Department of Purdue University is Chairman of the Committee and is editor of its publications.



C. M. MILLER, *President*
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Topeka, Kansas

R. W. Gregory, *Chairman*
Purdue University
Lafayette, Indiana

CHARLES W. SYLVESTER, *Treasurer*
Director of Vocational Education
Baltimore, Maryland

DR. J. C. WRIGHT'S MOTHER

Some one has said that in the shadow of every good man there walks a good mother. And how true it is! Everyone present at the little church of the Brethern at Overbrook, Kansas, on the afternoon of May 5, 1931, was impressed with the fact that Mrs. J. J. Wright was regarded with high esteem by those who had known her for half a century. On that particular afternoon Kansas mud roads were at their worst, yet not only the church but the church yard was filled with her neighbors and friends who had come to pay final homage to their long time friend. Tottering old age came; middle age came; youth came; and even little children seemed to sense the fact that some great loss had come to the community.

"Hannah Postma was born January 21, 1844, near Balk on the Zuyder Zee in Holland, and departed this life May 3, 1931, at her home in Overbrook, aged 87 years, 3 months and 12 days.

"She was the oldest child of Fakia and Petigia Postma, who came with their family to the U. S. in 1854 and located in Elkhart County, Indiana. There she was married to John J. Wright on October 1, 1863. To this union were born five sons and five daughters; two of the sons dying in infancy.

"In the year 1866, she with her husband and family, moved to Douglas County, Kansas, but returned to Indiana in 1874. Then in 1881, they again came to Kansas and located nine miles southeast of Overbrook. In 1912 the home was moved to town where she continued to reside until her death. Complications of age, pneumonia and leakage of the heart were responsible for her passing.

"Her husband departed this life in 1918 and one daughter, Mrs. R. A. Wise, preceded her about four years.

"She is survived by one brother, Webie Postma of Douglas County, one sister and two half-brothers in Indiana and her children, Mrs. F. E. Wise of Winfield, Kansas, W. G. Wright, Mrs. J. A. Forth, Mrs. E. E. Dodds, and Chloe Wright of Overbrook, J. H. Wright of Michigan Valley and J. C. Wright of Washington, D. C. Also twenty-one grandchildren and nineteen great-grandchildren and a host of other relatives and friends.

"She, with her husband, united with the Church of the Brethern in 1864. She took an active part in Church and Sunday School work as long as her health permitted. Her interest and loyality to her Lord has been an inspiration to her many friends and love for humanity has prompted her many acts of kindness. By her industry, patience, unselfishness, cheerfulness, and thoughtfulness for others, she endeared herself to young and old alike.

GENERAL PLAN OF THE CONVENTION PROGRAM

Wednesday, December 9, 1931

Morning	Trips to Schools and other places of interest.
Afternoon	
Evening	"Get Acquainted Party" Entertainment. Dancing

Thursday, December 10.

Morning	Sectional meetings devoted to a discussion of "Social and Economic
Afternoon	Trends in America" by outstanding agricultural, industrial, commercial and social leaders.
Evening	Annual Banquet.

Friday, December 11.

Morning	Sectional meetings—Agricultural Education, Homemaking, Industrial and Technical Education, Vocational Guidance, Commercial Education, Vocational Education, Nautical Education, Vocational Teacher Training, Foreman Training, Vocational Reeducation Continuation Schools—Adult Education.
Afternoon	Business Meeting "The Ships" Program
Evening	General Meeting.

Saturday, December 12.

Morning	Sectional Meetings—Same as Friday morning.

Trips

Schools
- Industrial Schools
- Agricultural Schools
- Technical Schools
- Art Schools
- Commercial
- Continuation
- Homemaking
- Evening Vocational

Industrial Establishments
- Newspaper
- Printing
- Shipyards
- Jewelry
- Candy
- Clothing
- Food

Agricultural
- Milk Distributing Plan
- Local Produce Market
- Fruit Auction
- Vegetable Market
- Poultry Market

General
- Metropolitan Museum
- Museum of Science and Industry
- Museum of Natural History
- Brooklyn Navy Yard
- Transatlantic Liner
- Statue of Liberty
- Office Building
- Stock Exchange

Commercial Offices
- Insurance
- Stocks and Bonds
- Financial
- Industrial
- Department Stores

Homemaking
- Testing Laboratories
- Design Studios
- Homemaking
- Textile Exhibits
- Department Stores
- Food Industries

NEW YORK CITY'S VOCATIONAL SCHOOL BUILDING PROGRAM

Completed 1931

	Accommoditations for	**Estimated Cost*
The Brooklyn Industrial High School for Girls	1,600	$1,345,000
Textile High School	4,000	2,790,000
Under Construction		
Bronx Continuation School	6,000	760,000
Samual Gompers Industrial High School	1,700	1,260,000
The Brooklyn Technical High School	5,500	4,300,000
Construction Authorized—Fall 1931		
Staten Island Vocational and Continuation School	4,000	1,100,000
Buildings Planned for Immediate Future		
Central Needle Trades Continuation School	6,000	1,100,000
The Brooklyn Boys Industrial High School	1,600	1,660,000
Williamsburg Continuation School	6,000	1,100,000
Queens Continuation School	3,000	400,000
Central Printing Trades Continuation School	4,000	1,500,000
The Boys Industrial High School, Queens	1,600	1,300,000
Total	45,000	$18,615,000

* Does not include cost of site.

MISS ENID W. LUNN

As an appreciation of her services toward the development of Vocational Education, the name of Miss Enid W. Lunn, State Supervisor of Vocational Home Economics Education for Ohio, has been added to the list of life members in the American Vocation Association.

The presentation of this membership by the Vocational Home Economics teachers of Ohio is regarded as a privilege, since it represents an opportunity for recognition of those admirable qualities which contribute to leadership in the field of Home Economics. Miss Lunn's tactful and fair-minded approach to every situation as well as her sympathetic and congenial personality have won for her an enviable position among her co-workers. Her continuous efforts directed in the interests of Vocational Education serve as an inspiration to those with whom she is associated.

Born in Franklin County near Columbus, Ohio, she later graduated from Columbus Normal School and taught in the elementary grades of the Columbus Public Schools. After graduating from the Ohio State University in 1915, she taught home economics in the high school at Lorain, Ohio. For one year following this experience, she was Home Demonstration Agent in Lorain County. In 1919 she joined the Vocational Home Economics education group of the Ohio State University, where she served as director of teacher improvement for one year, and as assistant state supervisor of home economics for one year. In 1921, she became a member of the State Department of Education, assuming at that time her present position.

Miss Lunn received her M.A. degree from the Ohio State University in 1930. She is an active member of Phi Upsilon Omicron.

Her position of state sypervisor has provided many opportunities for service in educational organizations, both state and national. Within the state she has served as a member of the Ohio Home Economics Association Council and upon the Executive Committee of the Ohio Vocational Association, as well as in many other capacities. Beside serving upon various national committees, she is chairman of the Evening School Committee of the Home Economics section of the North Atlantic region. She has been secretary of the Vocational Education Section of the National Education Association. In 1930 Miss Lunn was elected to membership in the National Council of Education.

BURTON E. NELSON

President Burton E. Nelson of The Stout Institute of Menomonie, Wisconsin, was one of the 60 life members created during the Wisconsin drive for life memberships last fall prior to the A. V. A. Convention in Milwaukee. Through a misunderstanding he failed to receive our request for his photograph until too late to be used in the May issue.

NEW LIFE MEMBERS

A. R. GRAHAM

This life membership in the A. V. A. was presented to Mr. A. R. Graham, Director Vocational School, Madison, Wisconsin by the Madison Chapter of American Institute of Banking. Quoting from their letter to Mr. Graham: "This action on the part of the Madison A. I. B. membership is a gesture to indicate, in a small way, their appreciation of the splendid cooperation and assistance given them in the past by the Madison Vocational School".

The Madison Chapter of the A. I. B. is made up of eighty young bank employees—cashiers, tellers, bookkeepers, etc., of Madison. The Madison Vocational School has conducted two evening classes for them each year for five years. One class dealt with commercial law and the other with negotiable instruments.

This is the First A. V. A. life membership sponsored by the American Institute of Banking. The Madison Chapter is highly commended by the officers and membership of the A. V. A. for their fitting recognition of the services of Mr. Graham and the Madison Vocational School.

Mr. A. R. Graham received his professional training for his present work in Whitewater State Teachers College, Armour Institute, Stout Institute and the University of Wisconsin. He gained his practical training through a series of experiences in positions held as teacher of Manual Arts in Urbana High School, Urbana, Illinois, and at Deerfield, Wisconsin, as Director of Vocational Work at Racine, Wisconsin, and as State Supervisor for Vocational Education in Wisconsin. He has continued his professional growth by maintaining membership in the national society for Vocational Guidance, by becoming a Life Member in the N. E. A. and by having maintained close association with the American Vocational Association.

THE CONVENTION PROGRAM

Tentative

AGRICULTURAL EDUCATION

Educational Trips

Wednesday, December 9.

(1) New Jersey trip, H. O. Sampson in charge
To New Jersey College of Agriculture; Middletown Township agricultural department, Leonardo, Freehold agricultural department; Walker-Gordon Farm with its famous rotolactor; Princeton University.

(2) New York trips, W. J. Weaver in charge.
(a) To State Institure of Applied Agriculture, Farmingdale, Long Island.
(b) If sufficient interest is manifested a party will be formed at Buffalo on Monday morning of convention week. Visits will be made to two typical high school departments of vocational agriculture, to the State School of Agriculture at Morrisville, and to the New York State College of Agriculture at Cornell University.

Friday, December 11.

(1) New York City Marketing trip, H. O. Sampson and W. J. Weaver in charge
To milk receiving plant, New York Central Yards; distributing plant of Dairymen's League Cooperative Association; Gansport Market; West Washington Poultry Market; Fruit and Vegetable Market; Fruit auction. Party will start from Pennsylvania Hotel at Midnight.

Friday, December 11.

Program

Chairman: A. K. Getman

9:00 Adjustments in Secondary Education to meet present trends in the economic and social life of America,. Dr. G. F. Counts, Columbia University.

10:00 Adjusting Agricultural Education to social and economic needs:
For the East A. K. Getman, State Supervisor of Vocational Agriculture, Albany New York
For the South Keith L. Holloway, University of Arkansas, Fayetteville, Arkansas.
For the West J. A. Guitteau, State Supervisor of Vocational Agriculture, Olympia, Washington

Saturday, December 12.

Supervisor and Teacher Training

Chairman: R. W. Heim, State Director of Vocational Education, Newark, Delaware

9:00 Research Program.
Policies of the reorganized research committee, Professor H. M. Hamlin, A. & M. College, Ames, Iowa.

9:15 Current Needs and Facilities for Research in Agricultural Education, Dr. F. W. Lathrop, Federal Board for Vocational Education, Washington, D. C.
A Summary of the Years' Progress in Research.

9:30 South, J. T. Wheeler, State College of Agriculture, Athens, Georgia.

9:45 West, S. D. Klemmedson, University of Arizona, Tuscon, Arizona.

10:00 North Atlantic, Dr. R. M. Stewart, Cornell University, Ithaca, New York.

10:15 North Central, Dr. C. V. Williams, A. & M. College, Manhattan, Kansas.

Discussion:

10:30 Progress in Agricultural Education, Dr. C. H. Lane, Federal Board for Vocational Education, Washington, C. D.

11:00 Business Session.
Editors' Report, AGRICULTURAL EDUCATION Magazine, Dr. Sherman Dickerson, University of Missouri, Columbia.
Business Managers' Report, AGRICULTURAL EDUCATION Magazine, Dr. W. F. Stewart, Ohio State University, Columbia.
Report of Committees:
National Contests
Future Farmers of America
Ten Year Clubs for Agricultural teachers, H. O. Sampson, Chairman, State Agricultural College, New Brunswick, New Jersey.

Agricultural Teachers Group:

Chairman, L. F. Packer, Trumansburg, New York.

9:00 Greetings from New York State, and responses by delegations from other states.

9:15 Short Business Meeting, with appointment of Committees.

10:00 Address by a leader in secondary Agricultural Education.

10:45 Informal Social Hour.

11:15 Business Meeting Resumed, with reports of Committees.

Continued on Page 8

GUIDANCE AND VOCATIONAL TRAINING OF HANDICAPPED CHILDREN

By Terry C. Foster
Agent, Vocational Rehabilitation, Federal Board for Vocational Education Washington, D. C.

In order to make myself clear, I think it well to begin by giving you an orientation into my thinking on this subject of guidance and vocational training. In the first place, I should like to substitute the term "Development of employability" for the words "Guidance and vocational training".

The ultimate purpose—the end result desired in this work is the adjustment of the handicapped child to social and economic life. In order to accomplish this end result, three things are necessary.

First, To so train and develop the personality of the child that he will be socially acceptable to those with whom he must live and work.

Second, To give him vocational skill so that he will be able to perform the duties incident to his employment.

Third, and finally, To place and adjust him in employment.

My discussion will concern itself with the first two, namely the development of personality and the giving of vocational skill, which, as I stated in the beginning, will be termed the "Development of employability."

Employability consists of a number of physical, mental, tempermental, and vocational qualifications, each of which the handicapped child must possess in the degree to which they are required in the job he is to fill. These qualifications are·

1. Physical ability to work at the job.
2. Mental ability to comprehend directions and instructions.
3. Educational ability equal to the requirements of the job.
4. Ability to get along with others.
5. Dependability.
6. Observation of standards of personal hygiene and personal appearance consistent with the job.
7. Last but not least—Possession of skill and efficiency in the performance of the operations involved in the job.

These elements constitute the physical, mental, temperamental, and vocational requirements of work-a-day life, and are the primary objectives toward which the efforts of the child, the parent, the surgeon, teacher, and finally the employer must be directed.

Therein lies the job of Guidance—beginning the day the handicap is discovered and continuing through every step to ultimate adjustment to social and economic life—to counsel and advise and coordinate the work of the home, the hospital, the school, and

Continued on Page 28

DR. WILLIAM J. O'SHEA
Superintendent of Schools
New York City

THE HON. GEO. J. RYAN, *Pres.*
New York City
Board of Education
Chairman
General Convention Committee

JOSEPH MILLER, JR., *Secretary*
New York City
Board of Education
Chairman
Entertainment Committee

To The Members of The Vocational Association

The Superintendent of Schools of the City of New York looks forward with pleasure to welcoming the delegates to the annual convention of the American Vocational Association. In his role as host to the many numbers of educators who will attend the convention in December, he urges visits to the vocational schools of the city.

The convention should be of great benefit to those who are engaged in conducting the vocational survey, a survey designed to establish for the schools a closer contact with industry, to the end that the schools may at all times have up-to-the-minute information as to the needs and requirements of the modern industrial world. With such information the schools hope to be of greater service to the community.

I foresee many benefits resulting from the assembly that takes place in December and wish for a large attendance.

Very truly yours,
Dr. William J. O'Shea, *Supt. of Schools*

To The Members of The American Vocational Association

New York City has been preparing for some time for the convention of the American Vocational Association, which is to be held in this city next December. It is the hope of the Board of Education that the delegates to the convention will derive great benefit from their visit to our city. New York in turn hopes to learn a great deal from the visiting educators.

At this time when we are engaged in training not alone the youth of our community, but a considerable number of the adult population as well, it is particularly fitting that the American Vocational Association should have chosen New York City for its convention.

As President of the Board of Education I extend a cordial invitation to all to visit our schools. I am hopeful that the convention will be of mutual benefit.

Sincerely yours,
George J. Ryan
President of the Board of Education.

Photo by Blank-Stoller, Inc.
DR. HAROLD G. CAMPBELL
Associate Superintendent of Schools
New York City

DR. WILLIAM E. GRADY
Associate Superintendent of Schools
New York City

DR. JOSEPH M. SHEEHAN
Associate Superintendent of Schools
New York City

PART-TIME EDUCATION

TENTATIVE PROGRAM

Friday Session

General Topic: Adapting Part-Time and Continuation Education to Social and Economic Trends.

(1) Applications from the field of commerce.
Speaker: Morris Siegel, *Director*
Evening and Continuation Schools
New York City

(2) Applications from the trades and industries.
Speaker: Oakley Ferney, *Chief*
Industrial Education Bureau,
State Department of Education,
Albany, New York

(3) Applications from home economics.
Speaker: Cleo Murtland, *Professor of Vocational Education*
University of Michigan
Ann Arbor, Michigan

(4) Applications from the field of agriculture
Speaker: P. L. Cressman, *Director*
Industrial and Continuation Education
State Department of Public Instruction
Harrisburg, Pennsylvania

(5) Discussion and Summary.

Saturday Session

Chairman: R. O. Small

General Topic: The Relation of Guidance and Counseling to Coordination in Trade, Industrial, Commercial and Continuation Schools.

Introductory Statement:
Speaker: R. J. Greenly, *Teacher Trainer*
University of Akron
Akron, Ohio

Report of Study on Guidance and Counseling to Coordination in Trade, Industrial, Commercial and Continuation Schools
Speaker: J. Ray Stine, *Principal*
Continuation School
Akron, Ohio

TRADE AND INDUSTRIAL EDUCATION

TENTIVE PROGRAM

Sub-Section Meetings
Friday Forenoon, December 11, 1931
9:30 A. M.

1. Full-Time Industrial Training
2. Full-Time Technical Training
3. Apprentice Training
4. Technical and Industrial Training for Adults
5. Industrial Teacher Training
6. Foreman Training
7. Cooperative Training

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1. FULL-TIME INDUSTRIAL TRAINING

Chairman: Robert C. Beebe, *Director*
Essex County Vocational Schools
Newark, New Jersey

Group 1

This section is intended for teachers and others interested in full-time trade and industrial training for boys.

(1) The Industrial Survey as a Means of Keeping in Touch with Changing Industrial Conditions
Speaker: Dr. Franklin Keller
East Side Continuation School
Olive, Oak, and James Streets
New York City

(2) The Vocational School as an Industrial Service Agency
Speaker: William Small
Assistant Superintendent of Schools
Niagara Falls, New York

APPRENTICESHIP TRAINING IN NEW YORK CITY

MORRIS E. SIEGEL
Director of Evening and Continuation Schools

Apprenticeship training in New York City is not a new thing, although during the past ten years it had considerable growth. In the early part of this century in connection with the evening trade schools, the Pattern Makers Union obtained permission to have their apprentices instructed in the Stuyvesant Evening Trade School. Later the sheet metal industry through joint committee of employers and representatives of organized labor cooperated with the Board of Education in organizing classes wherever there was available sheet metal equipment; there are three centers in Manhattan and two in Brooklyn. Classes for photo engravers and lithographers were organized in the Murray Hill and Stuyvesant Evening Trade schools. The photo engravers later were transferred to the Texile School where there was well-equipped laboratories. For several years the Apprenticeship School of R. Hoe and Company, manufacturers of printing presses, was connected with the continuation schools, and the Brooklyn Navy Apprenticeship School for Navy Yard workers has been for the past fifteen years a part of the Brooklyn Continuation School.

More recently the Building Congress through its apprenticeship commission has been cooperating with the Board of Education in conducting apprenticeship classes for the apprentice of the building industry. The scheme of organization for this type of work has been widely copied both in the United States and abroad. The Building Congress, composed of architects, engineers, contractors, labor men, material dealers and others interested in the building industry, appointed a representative group interested in apprenticeship. This apprenticeship committee, or commission, employs an executive director and a special personnel to organize and supervise apprenticeship committees for each trade. The trade committee is composed of an equal number of employers and representatives of organized labor; they establish rules and regulations for each trade, makes suggestions as to courses of study, teaching personnel, equipment, donate equipment and supplies and require attendance, and inspects work of the schools.

At present in cooperation with the Apprenticeship Commission of the Building Congress of New York City there are 163 classes and 3,548 students representing the following industries:

CONVENTION HEADQUARTERS
HOTEL PENNSYLVANIA

New York City Hotels Accessible to Convention Headquarters

	Rates Per Day Rooms with Bath	
The Governor Clinton 7th Avenue & 31st Street	Single Double	$3.00—$ 5.00 $5.00—$ 8.00
*Grand Hotel Broadway & 31st Street	Single Double	$2.50—$ 3.50 $3.50—$ 4.00
*Imperial Hotel Broadway & 32nd Street	Single Double	$2.50—$ 7.00 $4.00—$ 8.00
*McAlpin Hotel Broadway & 34th Street	Single Double	$3.50—$ 8.00 $5.00—$ 8.00
New Yorker Hotel 8th Avenue & 34th Street	Single Double	$3.50—$10.00 $5.00—$12.00
Pennsylvania Hotel 7th Avenue & 32nd Street	Single Double	$4.00—$10.00 $6.00—$12.00
Prince George Hotel 14 East 28th Street	Single Double	$3.00—$ 4.00 $4.00—$ 6.00
*Wolcott Hotel 4 West 31st Street	Single Double	$3.00—$ 3.50 $4.00—$ 5.00
*York Hotel 7th Avenue & 36th Street	Single Double	$3.00—$ 3.50 $4.00—$ 5.00

* Also rooms without bath.

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Lamp Shade and Novelty Work—Central Needle Trades School

Trade	*Number of Classes*
Electrical Installation & Practice	55
Sheet Metal detailing and practice	16
Plumbing	25
Carpentry and Joinery	13
Architectural Drawing	13
Plan Reading and Estimating	5
Practical Plastering and Plastering Detailing	8
Brick detailing	4
Painting and Decorating	5
Cabinet Making	2
Marble Trade Detailing	4
Marble Polishing	2
Steam Service Installation	2
Granite Cutting Trade Detailing	2
Ornamental Iron	1
Upholstery	3
Mill wrighting	1
Mosaic and Terrazzo	1
Metal Ceiling Erection	1
Total Classes	163

In addition the plasterers and the electricians require an attendance during the day on the employer's time of first and second year apprentices. The electrical industry also require journeymen whose work is not up to standard to attend special journeymen's classes, and has made special provision for classes for foremen and superintendents of construction as well as classes in low tension electricity. In addition are classes in ornamental iron and bronze drafting in cooperation with the industry.

In the printing industry there has been functioning recently an educational commission in obtaining a new building for the Central Printing Trades Continuation School which is intended as a center for all the educational work of the printing industry of New York City. The apprentice work in the printing industry at the present consists of, in addition to the classes in lithography, a Central School of four departments located at 240 West 40th Street and a non-public school for compositor apprentices.

The following is from the brief submitted by the Educational Commission Printing Industry of New York City:

> Printing constitutes one of the few industries still dependent upon high standards of individual craftsmanship. Improved machinery and processes have been, and are being introduced into the industry, as in all industries. While these improvements have increased the average production per individual worker, they have not lessened the emphasis on individual skill and have, in many cases, actually increased the skill and responsibility required.
>
> The preparation of the average journeymen craftsman in the printing trades requires five or more years of training and experience after

(3) Some Modifications of the Full-Time Training Programs to Meet Changing Conditions in Industry

Speaker: I. R. Anderson, *Principal*
Lathrop Trade School
Kansas City, Missouri

(4) Recent Developments in Trade and Industrial Training in the Full-Time School

Speaker: C. F. Klienfelter, *Special Agent*
Federal Board for Vocational Education
Washington, D. C.

Discussion Leader: Frank R. Flower, *Principal*
Atlantic City Vocational School
Atlantic City, New Jersey

Group 2

This section is intended for teachers and others interested in the work of the full-time vocational schools for girls.

Chairman Florence Marshall, *Principal*
Manhattan Trade School
New York, New York

Trends in Trade Training for Girls and Women

Five-minute presentations of trends in the pre-employment training of workers in the following fields.:

Printing

Grace A. Gilkey, *Director*
Worcester Trade School
Worcester, Massachusetts

Ethel Lovell
Theodore Ahrens Trade School
Louisville, Kentucky

The Garment Trades

Mortimer Ritter, *Principal*
Central Continuation School for Needle Trades
Brooklyn, New York

Grace Riggs, *Principal*
Jane Hayes Gates Institute for Girls
Kansas City, Missouri

Dressmaking

Ruth Sill, *Principal*
Philadelphia Trade School
Philadelphia, Pennsylvania

Margaret Jones, *Principal*
Brooklyn Industrial High School
Brooklyn, New York

Dental Assistants

Clara Krauter, *Principal*
Essex County Vocational School for Girls
Newark, New Jersey

Commercial Foods Work

Esther L. McNellis, *Principal*
Boston Trade School for Girls
Boston, Massachusetts

Florence Swegbe
Arsenal Technical High School
Indianapolis, Indiana

Manicuring and Hairdressing

Frank Wiggin Trade School
Los Angeles, California

Mildred Johnson, *Principal*
Atlantic City Vocational chool for Girls
Atlantic City, New Jersey

Restaurant Work

Lessie Oakley
Frank Wiggin Trade School
Los Angeles, California

Theresa Robinson
Bayonne Vocational School for Girls
Bayonne, New Jersey

Novelty Work

Manhattan Industrial High School for Girls

Retail Selling

Elizabeth Fish, *Principal*
Minneapolis Vocational High School
Minneapolis, Minnesota

S. J. Fleming
Assistant Superintendent of Schools
Seattle, Washington

Household Assistants

Lizzie Barbour, *Assistant Supt.*
State Industrial Education
Austin, Texas

Rosenwald Foundation
Chicago, Illinois

Children's Attendants

Florence P. Burns, *Superintendent*
Babies Hospital
Newark, New Jersey

Continued on Page 12

leaving full-time school. In those trades where the training is haphazard and unorganized the learning period is much longer. If the industry absorbs 2,000 workers a year, as it must to maintain its present employment levee, this means that a minimum of 10,000 workers must be in training. Where training is hap-hazard and unorganized, the number seeking to learn the trades is much larger than necessary with a consequent increase in human waste and a less satisfactory standard of craftsmanship.

Journeymen in all printing trades in New York City are paid higher wages than are paid anywhere else in the United States to similar craftsmen. The yearly earnings of journeymen in the major trades in the industry are also higher than those of craftsmen in any other industry in New York City. Since wages constitute the chief item of manufacturing cost of printing, it is obvious that the present wages can be maintained and printing continue to be done in New York in its present volume only if the highest standards of individual craftsmanship are maintained by the workers.

The printing industry of New York City is facing the most critical competitive situation of its history. With the advent of the teletypesetter, the photo-telegraph and the employment of faster forms of transportation, out-of-town competition has become a problem of real concern. However, the New York industry can and will maintain its volume of business and its high wages if the community will join with it in efficiently meeting the problem of trade training.

Any changes in the prosperity status of the city's second largest industry is bound to affect general conditions of the community. A flourishing industry encouraged and facilitated by adequate training opportunities means:

1. The continuance and expansion of better type vocational opportunities for youth of the community.
2. The maintenance and expansion of the buying power of the city's second largest and individually, best paid, group of industrial workers.
3. The consequent spread of prosperity from workers to tradespeople to other industries in ever widening circles.
4. Lessening of unemployment at middle life with its costly effects on individual and community by a training program which takes care of adult adjustment to technological changes as well as pro-

viding for apprentice training and induction.

School for Printers' Apprentices: Founded 1911; cooperatively operated by Printers League Section, New York Employing Printers Association, Typographical Union No. 6 and the Hudson Guild; enrollment 500; students apprenticed for five years; attend four hours weekly during last four years of apprenticeship; curriculum includes training in fundamentals of hand composition, related classes in English and Economics and one year of specialization in typesetting, layout and design, stonework or proof reading. (Several part-time teachers are supplied by the Board of Education.)

New York School of Photo-Engraving for Apprentice Training: Founded 1918; cooperatively operated by Photo-Engravers' Board of Trade of New York, New York. Photo-Engravers Union No. 1 and the Board of Education of the City of New York; enrollment 300; students apprenticed for five years; attend two evenings a week for full period of apprenticeship; curriculum includes principles of art, chemistry and photography.

School for Printing Pressmen: Founded 1925; cooperatively operated by Printers League Section, New York Employing Printers Association, New York Printing Pressmen's Union No. 51 and the Board of Education of the City of New York; enrollment 150; students apprenticed for four years; attend six hours weekly for full period of apprenticeship; curriculum includes training on job, job-cylinder and cylinder presses and related classes in inks, paper, use of instruments and the like.

School for Newspaper Pressmen: Founded 1925; cooperatively operated by Publishers Association of New York City, New York Newspaper Pressmen's Union No. 2 and the Board of Education of the City of New York; enrollment 200; students indentured for four years; attend four hours weekly for full period of apprenticeship; curriculum includes training in maintenance and operation of newspaper and rotogravure presses and related classes in physics, chemistry, mathematics and the like.

School for Machine Typesetting: Founded 1928; cooperatively operated by Printers League Section, New York Employing Printers Association, Publishers Association of New York City, Typographical Union No. 6 and Board of Education of the City of New York; enrollment 100; students fifth year composing room apprentices; attend six hours weekly; curriculum includes training in operation and maintenance of Linotype and Intertype machines.

Central Printing Trades Continuation School: Operated by the Board of Education of New York City, for boys under 17 years of age who are employed in some capacity in printing and allied trades (from this group will undoubtedly come many of the apprentices and journeymen of the future); enrollment, 1,000; curriculum includes hand composition, elements of job presswork and related classes in English, civics and the like.

For the Continuation School students the attendance is four hours either morning or afternoon once a week while in the other schools the apprentices attend on the employers' time in the afternoon and their own time in the evening.

The present equipment was donated by the employers and is worth approximately a quarter of a million dollars. Recently Mr. William Wise Wood donated, through the Newspaper Pressmen's Union, to the school a press worth one hundred thousand dollars ($100,000).

In a brief submitted by the Educational Commission of the Printing Industry of New York City for the acquisition of property for the new school, the following statement is made:

"The continued prosperity of any industry depends upon the effective selection and training of its manpower. The youth of a community, in turn, are best served when the educational facilities are coordinated with the vocational requirements and opportunities. These premises are particularly true whenever a high degree of individual aptitude and craftsmanship is still required as in the printing trades."

The present chaotic condition of the Needle Trades Industry makes it difficult to cooperate with the industry in the same manner as in the field of printing, but the principal of the Needle Trades School both in the day and evening session, and the principal of the Manhattan Evening Trade School have organized classes composed exclusively of learners who are, to all intents, apprentices.

In the Brooklyn Technical Trade School five classes in the various subdivisions of the shoe industry are being conducted in connection with the shoe manufacturers Board of Trade.

Classes for the jewelry craft are being conducted in the East Side Continuation School, Central Commercial Continuation School and the Evening School of Industrial Art. These classes have the cooperation of the Jewelry Craft Association.

Organized industry has found it necessary to foster the growth of the apprenticeship system for various reasons. The development of mass production requires a certain proportion of skilled men in connection with the building and up-keep of machine tools.

Certain industries such as building construction and printing will always require skilled men in large numbers. Formerly skilled journeymen could be obtained already trained from abroad or were able to be trained in industry because of the slower tempo. However, with the stoppage of immigration and the "speeding up" of industry this is no longer true. In addition the extreme specialization has prevented the training of all-round men.

The modern apprenticeship system discussed in this article enables industry to send the apprentice to the school to obtain those elements of theory and practice which he cannot obtain on the job. During the period of four or five years of apprenticeship he is given a knowledge of the fundamental principles of the industry, practice and such branches of the work which he does not come in contact with on the job, of tending to give a versatility which will be of increasing value to the mechanic of the future.

The aim of the apprenticeship course is not only to train journeymen but future leaders of industry who will be able to keep pace with the progress of the science and technique of their craft. In doing so industry will not only have a skilled worker, but the State will have a contented citizen.

Manhattan Industrial High School for Girls

Commercial Design

Dare Wells, *Principal*
Lucy Flower Technical High School
Chicago, Illinois

David Childs, *Principal*
Buffalo Technical High School
Buffalo, New York

Junior Office Practice

Charles Sylvester, *Director*
Vocational Education
Baltimore, Maryland

Dr. Lucy Cadwallader
South Philadelphia High School
Philadelphia, Pennsylvania

Textile Design

William Dooley, *Principal*
Textile High School, New York City

Placement and Follow-Up Work

Helen Livingstone, *Principal*
Hebrew Technical School for Girls
New York, New York

Alice Quade
Placement Department
Detroit Public Schools
Detroit, Michigan

2. Full Time Technical Training

Chairman: F. H. Wing
Assistant Superintendent of Schools
Buffalo, New York

(1) The Need for Technical Training of High School Grade
Speaker: Preston H. Smith
Superintendent of Schools
Bayonne, New Jersey

(2) The Technical High School and College Entrance Requirements
Speaker: W. R. Saunders, *Principal*
Northern Vocational School
Toronto, Canada

(3) The Function of the Technical High School
Speaker: Albert L. Colston, *Principal*
Brooklyn Technical High School
Brooklyn, New York

(4) The Need for Technical Training of Junior College Grade
Speaker: Nicholas Ricciardi
State Director Vocational Education
Sacramento, California

Discussion Leader: Horace B. Griffith
Assistant Superintendent of Schools
Utica, New York

3. Apprentice Training

Chairman: Oakley Furney, *Chief*
Bureau of Industrial Education
New York State Department of Education

(1) The Apprentice Training Program in Ontario
Speaker: F. S. Rutherford
Director of Vocational Education
Department of Education
Ontario, Canada

(2) The Apprentice Training Program in New York City
Speaker: Frank Johnson
Supervisor Apprentice Training
State Department of Education
Albany, New York

(3) Apprentice Training in the Metal Trades of Philadelphia
Speaker: Earl S. Sparks, *Secretary*
The Metal Manufacturers' Association of Philadelphia

(4) The Present Status of Apprentice Training in the United States
Speaker: Frank Cushman, *Chief*
Industrial Education Service
Federal Board for Vocational Education
Washington, D. C.

Discussion Leader: Joseph Constantine
Director Vocational Education
Passaic, New Jersey

4. Technical and Industrial Training for Adults

Chairman: A. S. Boynton, *Director*
State Vocational Education
Hartford, Connecticut

Continued on Page 14

VOCATIONAL TRAINING FOR UNEMPLOYED ADULTS

Morris E. Seigel
Director of Evening and Continuation Schools

The current industrial depression has brought to the schools a new phase of the recurring problem of unemployment. We find large groups of men, once having lost their positions, seemingly hopeless as well as helpless in finding work. These include vocational misfits who are unable to adjust themselves to any type of work which has come within their experience; those who were never taught any trade, but have held "blind alley" jobs; those who are told, when they apply for work, that they are "too old". Other groups are the surplus workers thrown into the labor market because of mergers and consequent reduction of working force; the specialist who knows but one sub-division of the industry and lacks the opportunity or versatility to work at another branch of his occupation while his own speciality is "slack". The latter include such occupations as the shoe and needle trades where changes of fashion make one or more types of specialist important.

What has New York City done to meet the problem of training and retraining for unemployed? Of course in our evening trade schools we have always given an opportunity to any one employed in an occupation in any capacity to learn other sub-divisions. This assisted the specialist to broaden out and the journeyman to gain experience which would make him more versatile. In connection with the classes in the day continuation school for printers, needle workers and building mechanics provision is made for unemployed journeymen to obtain training which will assist them to find employment. For instance, the introduction of a new machine in many cases would displace those who did not know its operation. The well-equipped Central Printing Trades School contains the similar new machines upon which training might be given. The older men who could not find work because they were not able to handle the heavier pieces of material, are trained to work on smaller machines where the parts were lighter. In the needle trades workers were given training in a subdivision which was busy while their own particular specialty was "slack".

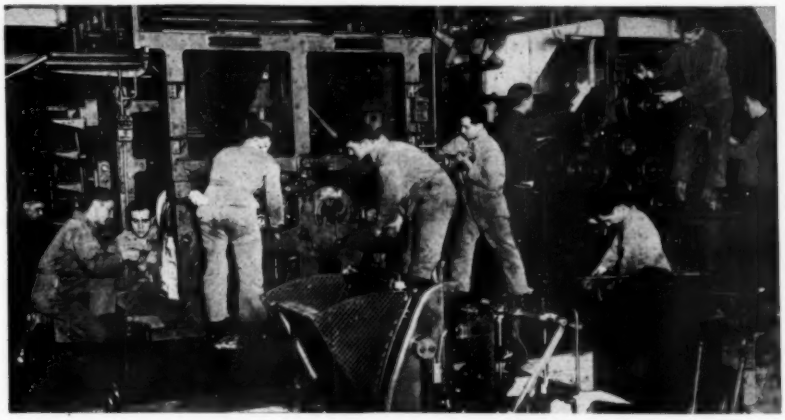
During the fall of 1930 at the request of the United Neighborhood Houses, under the leadership of Mr. Hesley of the Henry Street Settlement, teachers from the Continuation Schools were sent to settlement houses to interview and counsel thousands of unemployed adults who besieged these settlement houses for assistance. Confronted by this new problem the help of the

Continuation Schools was obtained for vocational guidance. As a result of these interviews in the various settlement houses the plan was devised which included (a) a survey of occupations to determine which industries in times of depression could absorb additional workers; (b) vocational guidance, including testing; (c) vocational training or re-training as the case might be, along the line recommendeded by the counsellors and in occupations warranted by the demands of industry; (d) placement not only in cooperation with existing agencies but a city-wide canvas for new positions by several hundred Continuation School teachers.

At every step the cooperation of existing agencies was obtained not only to secure additional personnel, but also to help the unemployed who needed financial and other material assistance without delay.

At the request of the Welfare Council representing every social agency in the greater city, the Board of Education opened the facilities of Continuation Schools to serve the unemployed.

In the East Side Continuation School we were fortunate in having the close cooperation of the Emmanuel Federated Employment Service which gave the services of the director, Mrs. Strakosh, her assistant as well as many counsellors and clerical workers, and in addition, for many months, distributed three hundred dollars ($300) a week to be used as carfares, lunch money and "tide-over" wage. Each case history is studied from the social side by a representative of the Federated Employment Service; the continuation school counsellor gives interviews and such tests as are necessary and the "trainee" (as the unemployed student is designated) is assigned to one of the teachers who serve as the trainee's advisor during his stay in the school, and whose function it is to see that the necessary adjustments are made in the trainee's program.

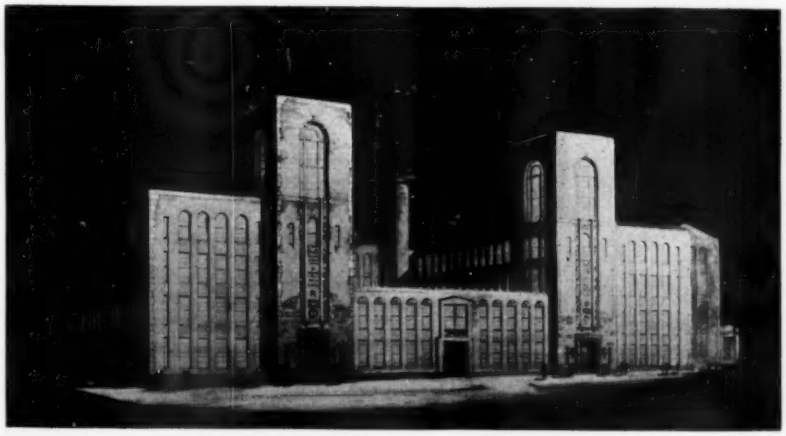


Class in maintenance and operation at Newspaper Pressmans School, The Central Printing Trades Continuation School

In the West Side Continuation School similar cooperation was given by the Greenwich Settlement House. The Central Commercial Continuation School, where almost a thousand unemployed commercial workers were being trained, had the cooperation of such organizations as the Girls' Service League, the Emergency Employment Service of the financial district under the guidance of Mr. Ackerly. To serve the financial district group sent to us by the latter organization, provision was made for special commercial training at the Young Israel Annex at 120 Wall Street. The Brooklyn Schools had the cooperation of a special committee headed by Dr. Riley, director of the Brooklyn Bureau of Charities.

Approximately 10,000 different unemployed persons received training in the various Continuation Schools. The following copy of a weekly report shows the attendance by schools in each type of work:

School	*No. of Adults*	
Central Building Trades	A. M.	P. M.
Electric Wiring	3	13
Drawing	0	0
Carpentry	1	1
Plumbing	0	0
Central Commercial		
Commercial Arithmetic		30
Advanced Typing		125
Beginners' Typing		174
Bookkeeping		74
Machine Practice		195
Stenography, Pitman		126
Stenography, Gregg		80
Commercial Art		22
Jewelry		20
Salesmanship		18
Commercial Law		18
Filing		15
English		25
At 120 Wall Street		
Stenography		15
Typing		15
Bookkeeping		10
		972
Central Needle Trades		
Pattern Making		185
Power Machine Operating		174
Dressmaking		143
Costume Design		74
Millinery		75
Fur Cutting and Operating		83
		734
Central Printing Trades		
Hand Composition		18
East Side	*No. of Adults*	
Academic Work		7
Arts		3
Auto Mechanics A. M.		16
Auto Mechanics P. M.		19
Banking		10
Bookkeeping		14
Bookkeeping Personality		3
Cafetria		10
Civil Service		7
Commercial Art		7
Electric Wiring I A. M.		5
Electric Wiring I P. M.		34
Garment Designing		11
Home Crafts		8
Jewelry		5
Machine Shop A. M.		2
Machine Shop P. M.		10
Mechanical Drawing A. M.		10
Mechanical Drawing P. M.		4
Millinery		25
Plumbing A. M.		2
Plumbing P. M.		3
Power Machine Operating		25
Printing A. M.		3
Printing P. M.		1



Samuel Gompers Industrial High School for Boys

(1) Short Unit Courses in new Trade Developments
Speaker: M. Reed Bass, *Assistant Director*
Dunwoody Institute
Minneapolis, Minnesota

(2) The Training Plans of the International Association of Fire Chiefs
Speaker: Fred Shepperd, *Headquarters Manager*
International Association Fire Chiefs
New York City

(3) Evening Courses for Workers in the Textile Industry
Speaker: Charles Carroll, *Director*
State Vocational Education
Providence, Rhode Island

(4) Preparing the Adult Worker to Meet Changing Conditions in Industry by Means of Schools for the Unemployed
Speaker: George H. Parkes, *Director*
Industrial Education
Williamsport, Pennsylvania
Discussion Leader: Arthur Wrigley, *Principal*
Elizabeth Vocational School
Elizabeth, New Jersey

5. Industrial Teacher Training

Chairman: Robert O. Small, *Director*
State Vocational Education
Boston, Massachusetts

(1) Significant Example of In-service Training
Speaker: M. Norcross Stratton
Trade and Industrial Teacher Trainer
Massachusetts State Department Education
Boston, Massachusetts

(2) In-service Training from the Point of View of a Principal
Speaker: James F. Mason, *Principal*
Paterson Vocational School
Paterson, New Jersey

(3) Teacher Training through Curriculum Building
Speaker: Ronald W. Kent, *Assistant Director*
Essex County Vocational Schools
Newark, New Jersey

(4) A Review of the Present Status of Teacher Training
Speaker: William C. Ash, *Professor*
Vocational Education
University of Pennsylvania
Discussion Leader: R. J. Greenly
Trade and Industrial Teacher Trainer
Ohio Department of Education
University of Akron

6. Foreman Training and Plant Training

Chairman: Herman J. Hall, *State Supervisor*
Trade and Industrial Education
Hartford, Connecticut

(1) Five-minute presentations of the state plan for Foreman Training and some results achieved during the last year in each of the following states: Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Virginia, Wisconsin, California, Arizona, Alabama, Oklahoma, Tennessee.

(2) Some Recent Developments in Plant Training—Illustrated
Speaker: G. A. McGarvey, *Agent*
Trade and Industrial Education
Federal Board for Vocational Education

(3) The New York Set-Up for the Training of Conference Leaders
Speaker: Arthur L. Mann, *Chief*
Bureau of Industrial Service
State Department of Education
Albany, New York

(4) The Promotion of Trade and Industrial Training through Foreman Training in a Specific Industry
Speaker: J. V. Ankeney, *State Director*
Industrial Education
Charleston, West Virginia
Discussion Leader: Marion W. Smith, *Supervisor*
Foreman Training
Wisconsin State Department
Appleton, Wisconsin

Continued on Page 16

Sewing	11
Stenography and Typewriting	46
Typewriting A. M. Girls	9
Typewriting P. M. Girls	9
Woodworking A. M.	4
Woodworking P. M.	2
Bookkeeping P. M.	6
Unassigned	35
Industrial Try-out A. M.	0
Industrial Try-out P. M.	0
Electric Wiring II A. M.	0
	366
West Side—Main Bldg.	A. M.
Auto Mechanics	5
Woodworking	1
Drawing	8
Office Practice	24
Typing	28
Civil Service	5
Electric Wiring	8
Machine Shop	1
	P. M.
Typing	21
Electric Wiring	4
Printing	2
Machine Shop	6
Drawing	4
Woodworking	4
West Side Annex	A. M.
Academic	1
	P. M.
Sewing	30
Bookkeeping	1
	153
Harlem Girls—Guidance Classes	
Typewriting	
Stenography	821
Bookkeeping	
Industrial Classes	
Novelty	
Sewing	440
Operating	
Tea Room	1
Beauty Culture	8
	1270
Bronx	
No. Adults—No Accommodations	
Brooklyn Boys	
Auto Mechanics	17
Machine Shop	15
Printing	7
Electric Wiring	10
Woodworking	1
General Mechanics	1
Aeronautics	2
Plumbing	0
Music	0
Dental Mechanics	6
Jewelry Making	0
Commercial Art	3
Mechanical Drawing	3
Banking	0
English to Foreigners	0
Accounting, Bus. Practice	2
Salesmanship	2
Civil Service	0
Art Metal	1
	94
Brooklyn Girls	
Steno. and Type	49
Dressmaking	8
English to Foreigners	1
Millinery & Novelty	5
Nursing	3
Office Practice	1
Tea Room	8
	76
East New York—Boys	
Automobile Mechanics	4
Electric Wiring	1
Machine Shop Practice	0
Printing	2
Woodworking	1

American Photo Service

A Draping Class—Central Needle Trades School

Girls	
Beauty Culture	0
Millinery	1
Power Machine Operating	4
Mixed	
Office Prac. & Book	0
Stenography & Typewriting	15
	28
Williamsburg	
Radio	6
Machine Shop	6
Electric Wiring	2
Automobile Mechanics	5
Drawing	5
Woodworking	1
Printing	3
Commercial	2
Millinery	0
Sewing	0
Homemaking	0
Beauty Culture	0
Queens	
Typewriting	65
Dressmaking	5
Woodworking	0
Homemaking	0
Machine Shop Practice	20
Electric Wiring	5
Printing	5
Plumbing	10
Auto Mechanics	30
Power Machine	15
	155
Jamaica	
Trade Drawing	1
Machine Shop Practice	0
Auto Mechanics	1
Woodworking	0
Electric Wiring	0
Printing	0
Home Nursing and Hygiene	0
	2
Staten Island	
Machine Shop	1
Total	3907
No. of Adults in Manhattan	3521
No. of Adults in Brooklyn	228
No. of Adults in Queens	157
No. of Adults in Richmond	1

In addition to the training program a comprehensive plan of canvassing for positions and placement of students was instituted, Scores of teachers were released for full-time service and several hundred teachers were assigned part-time to canvass for openings. The work for Manhattan and The Bronx was centralized in an office located in the Central Commercial Continuation School where all incoming calls were received, cleared and passed on to the schools having a supply of workers. The office for Queens and Brooklyn was located in the Brooklyn Boys' Continuation School. It is interesting to note that even in the height of depression skilled workers in the needle trades industry were wanted and many persons receiving training in the Continuation Schools are enabled to obtain positions at excellent wages.

Job studies were made of many industries. An interesting example of the work of waitreses made in the East Side Continuation School is described in an article in "Restaurant Management" for June, 1931.

The average register for the school year 1930-1031 was 1584 "trainees" who required the services of approximately sixty teachers. Whenever the groups were large enough a special teacher was assigned, otherwise the "trainees" were put in with the regular Continuation School groups.

The success of these classes was such that the Board of Education has authorized the continuance until the end of 1931 including the vacation months. In connection with the summer classes it may be interesting to note the letter from Dr. William Hodson, Secretary of the Welfare Council.

"During the past few months there has come an increasing realization among agencies dealing with unemployed adults that the facilities offered for training in the continuation schools offer one of the few constructive resources to which many of these persons can be referred. The opportunity for training or retraining as well as the counseling and advising at the schools has had a real effect upon the morale and state of mind of a large number of unemployed persons.

"From all indications, the summer period will present an increasing problem to social agencies and we believe that the training facilities in the continuation schools would be a great aid to caring for unemployed adults this summer.

"A very conservative set of recommendations has been drafted, prompted by the experience which the social agencies have had this spring.

"The Coordinating Committee on Unemployment of the Welfare Council recommends that the Board of Education make special provision this summer for continuing the training of unemployed adults in the Continuation Schools.

"Because—

1. The utilization this winter of opportunities in the continuation schools by unemployed adults has shown itself to be practical both in furnishing

Pacine and Atlantic Photos

Class in Typesetting and Maintenance—Central Printing Trades Continuation School

7. Cooperative Training

Chairman: A. B. Anderson, *State Supervisor*
Trade and Industrial Education
Wilmington High School
Wilmington, Delaware

(1) An Example of Cooperative Training for Technical Occupations
Speaker: John A. Randall, *President*
Mechanics Institute
Rochester, New York

(2) The Possibilities of a Cooperative Course in a Small High School
Speaker: Arthur L. Perry, *Superintendent of Schools*
Rahway, New Jersey

(3) Recent Developments in Plans for Cooperative Training
Speaker: James R. Coxen
Federal Board for Vocational Education
Washington, D. C.

(4) Some Results of Cooperative Training in California
Speaker: James C. Beswick, *Chief*
Bureau Trade and Industrial Education
Sacramento, California

Discussion Leader: N. S. Hudson, *State Supervisor*
Industrial Education
State Department of Education
Austin, Texas

TRADE AND INDUSTRIAL EDUCATION

Tentative Program

Saturday Forenoon, December 12, 1931
9:30 A. M.

1. Electrical Industries.
2. The Building Trades
3. The Textile Trades
4. The Airplane Industry
5. The Metal Trades

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1. Electrical Industries

Chairman: E. L. Heusch, *State Supervisor*
Trade and Industrial Education
Columbus, Ohio.

1. Some Significant Trends in the Electrical Industries.
Robin Beach, *Professor*
Brooklyn Polytechnic Institute, and
Educational Director, Brooklyn Edison Company,
Brooklyn, New York.
2. Significant Trends in the Electrical Industries as Seen by Organized Labor.
International Brotherhood of Electrical Workers
Washington, D. C.
3. Training at Fort Monmouth for the Signal Corps of the United States Army.
Colonel A. F. Cowan, *Commandant*
Signal Corps School
Fort Monmouth, New Jersey
4. Training for the Electrical Industries in the Seneca (Buffalo) Vocational School
Francis H. Wing
Assistant Superintendent of Schools
Buffalo, New York
5. *Discussion Leaders:*
Warren D. Matthews
Director of Plant School
New Jersey Bell Telephone Co.
(540 Broad Street), Newark,
New Jersey
O. H. Turner, *Superintendent*
David Ranken School of
Mechanical Trades
St. Louis, Missouri

2. The Building Trades

Chairman: O. D. Adams, *State Director*
Vocational Education
Portland, Oregon

1. Some Significant Trends in the Building Trades
Dwight Hoopingarner, *Executive Secretary*
American Construction Council
New York City

Continued on Page 18

more training or retraining, and giving a better opportunity for placement, as well as keeping up the morale of those who have participated.
2. Recruiting of adults for continuation school courses has gained increasing momentum as the temporarily unused facilities in this group of schools have become known.
3. The situation facing unemployed adults will continue through the summer and the continuation school organization is one of the community resources which can give constructive help if their staff and facilities are available.
4. Organizations working with illiterate and unskilled adults have pointed out the need for an experimental day school for adults."

In addition, the Budget Committee of the Board of Education has recommended that provision be made in the budget for 1932 to continue the work until December 31, 1932.

As to the results achieved thousands of letters which have been received from individuals benefited, as well as cooperating agencies, show that the continuation schools were helpful not only from the point of view of training and placement, but because they gave the much needed counsel which helped the unemployed person to keep up their morale in the darkest hour of their lives; thousands who felt that no one was interested in their welfare had an opportunity to discuss their problems with experienced and sympathetic counsellors. The unemployed are definitely casualities of warfare, not of battlefields, but of industry and need rehabilitation in the same manner as the wounded soldiers. New York City has the assurance of budgetary provision for this work until the end of 1932. There is no doubt that such a vocational education program may prove to be a permanent factor in our economic system.

CONTINUATION SCHOOLS IN THE CITY OF NEW YORK

William E. Grady
Associate Superintendent

That the continuation schools represent a marked advance in the theory and practice of education is generally conceded. This type of opportunity school has added to our system a flexible unit, which serves the needs of adolescent youth, industry and citizenship. In New York State it has been abundantly demonstrated that the continuation school law of 1919, enacted through the wisdom of the Honorable Alfred E. Smith, then Governor of the

Queens Continuation School for Girls

State of New York, and Dr. John H. Finley, then Commissioner of Education has proved its right to be called a Child's Charter. It has given to the adolescent boy and girl who has not completed a high school education, opportunities for schooling that they have been glad to avail themselves of, in order to prepare themselves for useful occupations and the political life of the community. As President Nicholas Murray Butler predicted, "A school is not the alternative to work or its enemy, and work is not the alternative to school or its enemy; both the school and work are supplementary parts of a single process through which the training for life passes into the active work of life itself".

During the twelve years that have elasped, the continuation school system of this City has grown to include 11 neighborhood and 4 central schools, employs approximately 550 teachers, enrolls 72,000 pupils, and costs approximately two and one-half million dollars for current annual expenses. The older buildings in which the schools were originally housed are being superseded by modern buildings or better rented quarters. A new building has been provided for the Queens Continuation School; the Bronx Continuation School is in the course of construction; and the construction of the new continuation school on Staten Island will be begun in the Fall. Moreovor, the State Aid for the improvement of equipment amounting to as much as $125,000.00 per year, has been a great help.

There has been a gradual clarification of the objectives of the continuation school. While due emphasis is laid upon academic work, it has become increasingly apparant that within four hours weekly the most profitable work is that which helps the youth to discover and appreciate his own condition as regards health, personal traits, specific abilities, and the use of his leisure time. The counselling and guidance work has assumed greater importance than it formerly had. Indeed, for the first time in the lives of many of these pupils, they have an opportunity not only to gain a variety of commercial and industrial experiences, but to sit down beside intelligent and sympathetic teachers who help them to solve difficulties that were the basis of discouragement, insubordination, or failure. The well-equipped, well-managed continuation school is indeed an opportunity school in which are salvaged boys and girls who might otherwise have become inefficient, discontented workers, or even juvenile delinquents.

Perhaps the most interesting innovation of the past year has been the extension of service not only to unemployed minors who attend twenty hours per week, but to unemployed adults of all ages. These folks are not particularly interested in theroies of unemployment which attribute their predicament to seasonal, cyclical, or technical conditions. They do not care whether or not the existing economic depression is due to distribution of gold in the world markets, faulty credit structure, installment buying, excessive mechanised production, or under-consumption. They are out of a job and feel the need of supplemental training, or training anew in various fields of industrial and commercial work. They know that the employer either will not or cannot supply such service. They have turned with confidence to the school system. Fortunately, because of decreased registration in the continuation schools, because of the movement of pupils into the senior high schools, it was possible to accommodate approximately 8,000 adults in the continuation schools during the spring term. Moreover, because of the interest and generosity of the Board of Education, provision was made for the operation of two continuation schools during the summer of 1931. In both the East Side Continuation School and the Harlem Continuation School the demands of the adult group ranging from 20 to 50 years of age, exceeded the capacity of the shops, and several hundred were kept on waiting lists. All who have visited these classes and spoken to these mature students, have been deeply impressed by their personal difficulties, by their eagerness to learn and their determination to reshape their lives through the retraining which the school supplies.

Indeed the continuation school meets real needs that the other types of day or evening school organization do not satisfy. Both in organization and method this type of school is flexible enough to adjust itself to changing conditions. As the chief agency for the education of the under-privileged juvenile and adult, the continuation school has amply justified the high expectations of its distinguished sponsors.

Pacific and Atlantic Photos

Class in Newspaper Press Work—The Central Printing Trades Continuation School

2. Significant Trends in the Building Trades as Seen by Organized Labor.
   John Halkett, *President*
   Building Trades Council
   New York City
3. Training through Cooperation between Industry and the Vocational Schools
   E. Lewis Hayes, *Director*
   Building Trades School
   Detroit, Michigan
4. Some Recent Developments in Training for the Building Trades in Public Vocational Schools
   G. A. McGarvey, *Agent*
   Industrial Education
   Federal Board for Vocational Education
   Washington, D. C.
5. *Discussion Leaders:*
   Donald Kidd, *Director*
   Vocational Education
   Syracuse, New York
   James F. Johnson, *Principal*
   Essex County Vocational School for Boys
   Newark, New Jersey

3. The Textile Trades

Chairman: T. E. Browne, *Director*
State Vocational Education
Raleigh, North Carolina

1. Some Significant Trends in the Textile Industries
   Douglas G. Woolf, *Editor*
   Textile World
   New York City
2. Trends Affecting the Training of the Workers in the Cotton Manufacturing Industry
   Donald Comer, *President*
   Avondale Mills
   Birmingham, Alabama
3. Technical Training for the Cotton Manufacturing Industry at the Georgia Institute of Technology.
   H. S. Busby, *Director*
   Textile Department
   Georgia School of Technology
   Atlanta, Georgia
4. Training for the Silk Manufacturing Industry in a Public Vocational School
   J. G. Echmalian, *Principal*
   South Manchester Trade School
   South Manchester, Connecticut
5. *Discussion Leaders:*
   William Dooley, *Principal*
   Textile High School
   New York City
   Percy Wood, *President*
   Oriental Silk Printing Company
   Paterson, New Jersey

4. The Airpane Industry

Chairman: Roland H. Spaulding
Specialist in Aeronautical Education
Daniel Guggenheim Foundation
New York University

1. Some Significant Trends in the Airplane Industry
   Joseph S. Marriott, *Chief*, Inspection Service
   Aeronautics Branch, United States Department of Commerce
   Washington, D. C.
2. What is the Field for Training in Aeronautics
   W. T. Van Horn, *Supervising Engineer*
   United States Navy Yard
   Philadelphia, Pennsylvania
3. Training for the Airplane Industry in the Camden County (New Jersey) Vocational School
   Joseph M. Hall, *Director*
   Camden County Vocational School
   Merchantville, New Jersey
4. Training Factory Service Men
   George Chapline
   Wright Aeronautical Corporation
   Paterson, New Jersey

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COMMERCIAL EDUCATION IN THE NEW YORK CITY HIGH SCHOOLS

Dr. Nathaniel Altholz
Director of Commercial Education

New York City has a staff of 1036 commercial teachers engaged in training our young people in the senior high schools for business vocations. Approximately 850 of these teachers are college graduates. Two out of every three, in addition, have had business experience averaging three years. This professional and business equipment of our teachers is highly important for practical business teaching.

In point of pupils instructed, the commercial department reflects the colossal character of our local school system. Commercial work is offered in 38 out of the 41 high schools. The total pupil registration in the senior high schools on March 31 was approximately 185,000. Of this number 56,000 were receiving instruction in the shorthand and typewriting studies and 42,000 in the bookkeeping group. The regular commercial course covers four years and embraces a wide range of studies designed to meet the varying needs and abilities of the student. In many schools the program is so organized as to permit a student to specialize in the field of bookkeeping, stenography, or salesmanship.

We have been experimenting for the past year with a revised course in some of our recently established high schools. In planning this course we had two major objectives in mind, (1) to prepare our young people as ultimate intelligent and prudent consumers of the world's economic goods and services, and (2) to make these students vocationally efficient in rendering business service. We have been guided also by the fact that for most of our commercial students the high school marks their last point of contact with formal schooling. It is highly desirable that in addition to providing intensive training in the technical subjects, there shall be opportunity for study in the liberal arts, languages and sciences, out of which may grow an appreciation of the forces, influences and ideals beyond the scope of business that make for complete living, good citizenship and social service. This is the justification for devoting four years in high school to preparation for business as against the short business course than can only give a very narrow and limited preparation for an immediate job. Selling one's services, like selling any other commodity, is an intensely competitive enterprise. Business is so highly organized and so scientifically conducted that it is attracting the best talents and brains in the country. It places a premium on higher general and technical education and shows a distinct preference for high school and college

graduates when the opportunities for placement and promotion arise. It has been conclusively established that after the preliminary period of apprenticeship, the high school graduate forges ahead of his less fortunate co-worker who has not had the advantage of a complete secondary education.

The commercial course is no longer a refuge for the mentally incompetent. The old order where commercial training was stigmatized as a type of education designed for the intelligent weaklings and where occupation in business was regarded as fit only for those not endowed with sufficiently high native intellects for professional careers—that order has passed. In its place has come a better understanding of the high standards of ability, scholarship and character, essential to success and promotion in business life and an appreciation of our system of public commercial training for the achievement of these standards.

It is regrettable to note the high rate of mortality in the commercial department. It is true that in a good many instances the cause of leaving school is economic pressure in the home; but there are many cases of voluntary drop-outs who succumb to the lure of the pay envelope or who have the mistaken notion that they have reached the stage of economic competence when they have had a year's training in typing or in keeping simple accounts. Great indeed is the disappointment of these misguided young people when, later, disillusionment comes. I wish most earnestly to stress the importance of spending the years of adolescence at school, where by assiduous self-application and under expert teacher guidance our young people interested in following a business calling may grow in body and mind, acquire proficiency in some marketable skill, and develop those traits of personality and character that make for success in business and in social life.

Let us consider for a moment the situation in which economic hardship at home compels students to leave before completing the course. How is this problem being met? We are trying to meet it in two ways. First, the four-year course is so arranged as to enable the student at the end of the first year to qualify for a junior clercial position, such as that of office clerk, sales clerk, shipping clerk, filing clerk, or mail clerk. Every student during the first year is trained to operate a typewriter and to perform the routine tasks of the office, such as filing, handling the mail, operating the telephone switchboard, using the mimeograph and other duplicating devices, keeping stock, preparing invoices, figuring work tickets and time cards, handling purchase and sales orders, etc. A survey is made of the vocations and industries in the metropolitan area. The student learns someting about the type of training necessary for these occupations, the nature of the work, the conditions of employment, and the opportunities for advancement. Besides the technical training, instruction is given in English, health education, art and music appreciation, citizenship and elementary science. No study is begun that cannot be completed as a unit subject by the end of the year. For the student who continues school this year's work is a foundation for the later technical studies in bookkeeping, stenography, salesmanship, commercial mathematics, business law, secretarial practice, office machine operation and economics. On the other hand, the student who has to leave is equipped with some basic skills, has some definite conception of the organization, tools and processes of business, and has received the help of the vocational guidance expert in the school. I stress this phase of our work because the percentage of drop-outs is the largest in the first year.

In three high schools we offer a two-year concentrated business course, which is almost entirely devoted to shorthand, typewriting and bookkeeping. In four schools an intensive six-months postgraduate course is provided for graduates from the academic course who desire special training for business. In four other high schools cooperative classes are maintained, in which the pupils alternate by weeks between the school and the job. They are placed by coordinators in selling and clerical positions in department stores, banks and the telephone company. Finally, commercial work is offered in the continuation schools and the evening high schools to those employed who wish to secure additional business training.

Even from this brief resume of the various types of commercial training offered, it is apparent that our problem is quite complex. On the one hand, we find concentrated in this city the greatest variety of types of business in the world, each with its special vocational requirements. On the other hand, we have the largest and most inclusive cosmopolitan school population in the world. It is our job to bring the preparation for business into harmony with the development of the individual boy or girl to the limits of his interests, aptitudes and native intelligence.

American Photo Service, Inc.

A Cooperative Tailoring Class—Central Needle Trades School

IMPORTANT COUNTY VOCATIONAL EDUCATION LEGISLATION

On March 23, 1931, the General Assembly of New York State, enacted a law providing for "establishing a county commission for special education in Westchester County and for the establishment and operation of a special education district therein."

The county commission for special education is given power to:

1. Determine the special educational needs of the district.

2. Establish schools or classes for physically handicapped children.

3. Establish and maintain vocational schools and classes in agriculture, industry, commerce, technical and home making subjects.

4. Provide vocational guidance service.

5. Employ a director of special education.

The commission is authorized to take the steps necessary to provide funds, buildings, equipment, and personnel to carry out the provisions of the act.

5. *Discussion Leaders:*
R. W. Hambrook, *Special Agent*
Trade and Industrial Education
Federal Board for Vocational Education
Washington, D. C.

W. B. Kamprath, *Principal*
Burgard Industrial High School
Buffalo, New York

5. The Metal Trades

Chairman: S. E. Patrick, *State Director*
Vocational Education
Augusta, Maine.

1. Some Significant Trends in the Metal Trades
Morris Leeds, *President*
The Metal Manufacturers' Association of Philadelphia
Philadelphia, Pennsylvania

2. An Example of Training within the Industry
Director Apprentice Training
Brown and Sharpe Manufacturing Company
Providence, Rhode Island

3. An Example of Training on a Cooperative Basis
Edgar Winters, *Principal*
Beverly Vocational School
Beverly, Massachusetts

4. Training for the Metal Trades in a Full-Time Vocational School
Loron H. Turner, *Principal*
Clifford Connelly Trade School
Pittsburgh, Pennsylvania

5. *Discussion Leaders:*
F. J. Trinder, *Director*
Apprentice Training
Saco-Lowell Mills
Saco, Maine

Henry Roesch
Director of Education
Chicago Metal Trades' Assn.
Chicago, Illinois

VOCATIONAL GUIDANCE

Program
9:00 A. M.
Friday, December 11, 1931.

Presiding: Paul W. Chapman, *State Director*
Vocational Education
Athens, Georgia

Gathering Information About Occupations
Speaker: Mary P. Corre, *Director*
Occupational Research and Counseling Division
Cincinnati Public Schools
Speaker: Fred C. Smith, *Editor*
Vocational Guidance Magazine, Harvard University
Cambridge, Massachusetts
Speaker: Roy N. Anderson, *Associate in Guidance and Personnel*
Teachers College
Columbia University, New York

Teaching The Class In Occupations
Speaker: Ralph Gallagher, *Guidance Advisor*
Public Schools
Elizabeth, New Jersey

Counseling Adults
Speaker: Paul S. Achilles
The Psychological Corporation
New York City

Placement And Follow-Up
Speaker: Clare L. Lewis, *Director*
Division of Junior Placement
Department of Labor
State of New York

Saturday Morning
9:00 A. M.
December 12, 1931

Presiding: Dr. Franklin Keller, *Director*
East Side Continuation School
New York City

Continued on Page 22

THE GENERAL CONVENTION COMMITTEE

Hon. James J. Walker, *Honorary Chairman*
Mayor of New York

Hon. George J. Ryan, *Chairman*
President of the Board of Education
Magnus W. Alexander, President
National Industrial Conference Bd., Inc.
Mrs. Roger H. Bacon, Member
Advisory Bd. on Indist. Education
Bruce Barton
Baton, Barton, Durstine & Osborn
Karl A. Bickel, President
United Press Associations
Isaac H. Blanchard
The Blanchard Press, Inc.
Peter J. Brady, President
Federation Bank & Trust Co.
Paul Block, President
Paul Block & Associates
John S. Burke, President
B. Altman & Co.
Dr. Harold G. Campbell
Depury and Associate Supt. of Schools
Eugene A. Colligan
Associate Supt. of Schools
Hon. James J. Crawford,
State Senator
Joseph F. Dujat, Member
Advisory Board on Industrial Ed.
E. R. Eastman, Editor
American Agriculturist
Frederick H. Ecker, President
Metropolitan Life Insurance Co.
Ernest F. Eilert, President
The Eilert Printing Co.
Edward W. Edwards, Member
State Industrial Board
Dr. John H. Finley, Associate Editor, New York Times
Chairman of Advisory Bd. on Industrial Education.
George R. Fitts, Member of Bd. of Directors,
The Dairymen's League Cooperative Association, Inc.
Hugh Frayne, Representative American Federation of Labor.
Dr. William E. Grady
Associate Superintendent of Schools
William Kennedy, Jr., President
The Brooklyn Chamber of Commerce
Sam A. Lewisohn
Adolph Lewisohn & Sons
Charles W. Lyon
Associate Supt. of Schools
Edward Mandel
Associate Supt. of Schools
Julian S. Mason, Editor
New York Evening Post
Alexander P. Mayper, Vice Pres.
United Parents' Associations
Max Meyer, Chairman
The Needletrades Educational Commission
Mrs. Margaret McAleenan, Member
Board of Education
V. Rev. Joseph V. S. McClancy
Supt. Catholic Schools,
Diocese of Brooklyn
The Hon. Joseph V. McKee, President
The Board of Aldermen

Continued on Page 22

HOME MAKING IN THE NEW YORK CITY SCHOOLS

Miss Martha Westfall
Director of Homemaking

Recently in an address before the students of the Columbia Summer School a Professor of Education made the following statement: "There are really splendid opportunities for American Educators to use the schools to elevate American family and household life. They should offer to students in the Junior and Senior High Schools genuinely cultural, that is appreciational, courses designed to widen, deepen, and give lasting vitality to all those tastes, ideals, valuations and comprehensions which are the basis of fine conjugality, home-building, rearing of children and purchases for house-hold utilizations."

Originally the term home economics meant literally instruction in how to prepare and cook food for the family; How to cut and sew certain articles of clothing and supplies for the linen closet. Today home economics education has as its aim that kind of instruction which will function in the present day life of the pupils because it recognizes their needs, abilities and interests. It strives to enable the pupils to acquire not only skills and information but also right attitudes, good habits, and ideals of health, citizenship, leisure and of work; to awaken an interest in the study of little children, their needs, development and guidance; to give them also a knowledge of the occupations open to women who have home economics training so that girls with interest and ability in their field may have a broad vision of the possibilities of good training in home making; to give the pupils a well rounded conception of the whole field of home education in its true perspective, and to help them see that home making is a composite vocation.

In the home making department of the New York City public schools approximately 100,000 girls are under instruction learning the fundamentals which are of immediate value to them individually, in the home and in the community.

In the seventh and eight grades emphasis is placed on the skills to do the simple household processes, and the establishment of good health habits. The necessity for having the proper conditions under which to begin this training has resulted in a new type of equipment. This equipment has been made a part of the plan of all the new Junior High school buildings. Picture a large room divided in half. On one side a long table fitted for twelve girls. Each girl has her individual stove and a drawer and cupboard to hold the necessary bowls, plates, knives and forks, pots and pans,—in fact everything needed to prepare and cook foods good for children to eat. Here it is that girls learn to cook, to measure accurately and to care for their household appliances under the careful guidance of the teacher. They eat their own products and judge them, thus learning the right standards.

Let us now go with the girls the following week to the other side of the room where we find three kitchens, each one just big enough for four girls. These are not make believe kitchens but real ones completely equipped even to the sink, broom and garbage pail. The girls in these small kitchens work independently and prepare quantities of food large enough to serve a family of four or six. They are permitted by the Board of Education to pay for the materials used and to carry home the products to share with their families. In this way natural predjucies regarding food are broken down and an interchange of the best foods of every nationality is accepted. While this independent work is being done in the small kitchens the teacher is instructing another group of girls at the long table. Thus the groups rotate.

Across the hall is a little home consisting of a living room, kitchen, bedroom and bath. Much interesting work is done to make them reach the highest ideals of good taste with the keynote of simplicity. In several of the schools the boys have contributed pieces of furniture made in the shops. The boys have also helped the girls sandpaper, restain and refinish worn furniture. Industrial classes have contributed some of their handiwork, as desk sets, lamp shades, dresser covers and bed spreads. The art classes have helped in making original posters and in simple decoration of pottery and glass. The ungraded classes have woven rugs of the carpet rags cut and sewed by the girls in the home making classes. Getting together the materials for rugs is a good use of liesure time. There are in every class pupils who are speedy and therefore finish their work before the slower ones. A basket filled with rug material is at hand and can be turned to by these quick pupils, and so roll slowly but surely the balls of carpet rags and eventually the rug appears as a concrete result.

As far as possible home conditions exist in the apartments, and to create a home atmosphere the class is divided into families, each family choosing a name and selecting one of the group to be the mother. One family will go to the kitchen to prepare the meal for which they have previously planned and marketed. Another family is planning the next meal, carefully considering the choice of foods, proper combinations to meet the bodily requirements and to satisfy the eye and appetite. Another family is taking care of the bedroom. The bathroom will be cleaned later by the girl who is taking a bath, permission to take baths having been secured from the parents. Some schools have reported as many as 140 baths taken in a term. In some of the older buildings where no apartment is provided a class room has been fitted up in substitution. In other old schools the home making classes are taking care of the teachers' rooms as a project.

In addition to the work described above the teachers of home making have assumed responsibility in helping to combat malnutrition among children in the grades. Special nutrition classes are formed and in many schools, once or twice each term, the assembly period is devoted to the presentation of a nutrition program.

Each Senior High School in New York City has its own particular problem which must be met and solved in the way best suited to its needs. To make a course of study in home making which would be adaptable to each situation is not practical. Therefore a number of lesson units have been worked out which may be used. In general the units relate to the teaching of Human Relationship, The House and the Home, Foods, Child Development and Guidance, and Vocational and Industrial Opportunities for Women. These general units are divided and subdivided so that they may be most effectively used.

In conclusion, if we succeed in our aims to give the girls a concrete knowledge of food, to set up in their minds standards of work, and standards by which to judge foods and if we develop in them skills in general technique and in executing fundamental house keeping processes, then will the girls have not only gained power to do and to cooperate, but we have laid the foundation for a permanent interest in good home making.

With right habits of living established and a love for home and its ideals, with definitely defined ways to enjoy leisure the girls are equipped for healthy, normal living.

Beyond this we have tried to have these girls realize that while home is the center it cannot be the boundary of their interests and responsibilities, but that each one has a civic duty to the community in which she lives and to all with whom she comes in contact.

88 LIFE MEMBERS

Vocational Guidance By Radio
Speaker: Leonard M. Miller, *Vocational Director*
J. C. Penny Foundation
New York City

Cooperation Between Schools And Service Organizations
Speaker: Joseph V. Hanna, *Personal Counseling Secretary*
Y. M. C. A., New York City, West Side Branch
Assistant Professor of Psychology,
New York University

Forestalling Unemployment By Training For Several Jobs
Speaker: Florence M. Marshall, *Principal*
Manhattan Trade School for Girls

How To Find The Right Vocation (A talking Picture based on the book of Dr. Harry D. Kitson)
Edgar M. Stover
Research Association, Electrical Research Products,
Western Electric Co., New York

VOCATIONAL REHABILITATION

TENTATIVE PROGRAM

Thursday Morning, December 10, 1931

Chairman: H. L. Stanton, *Supervisor of Rehabilitation*
State of North Carolina

Topic: Relation of Rehabilitation to the Crippled Children Movement.

(1) Trends of Social Welfare Legislation
(Speaker to be Selected)

(2) Relationship of Rehabilitation to the Crippled Children Movement.
New York Program
Joseph J. Enders, *Chief*
Crippled Children's Bureau
State of New York
Wisconsin Program
W. F. Faulkes, *Supervisor*
Vocational Rehabilitation
State of Wisconsin
New Jersey Program
C. V. Bleecker, *Supervisor*
Vocational Rehabilitation
State of New Jersey

Thursday Afternoon, December 10, 1931.

Chairman: R. M. Little, *Chief*
Bureau of Rehabilitation
State of New York

(1) Selection of Cases
Leader: C. V. Bleecker, *Supervisor*
Vocational Rehabilitation
State of New Jersey

(2) Case Work Methods
Leader: R. C. Thompson, *Supervisor*
Vocational Rehabilitation
State of Maryland

(3) When Are Cases Closed as Rehabilitated?
Leader: Leroy N. Koonz, *Supervisor*
Vocational Rehabilitation
State of Maine

Friday Morning, December 11, 1931

Chairman: I. M. Ristine, *Agent*
Division of Rehabilitation
Federal Board for Vocational Education
Washington, D. C.

(1) How Far are Statistics Comparable?
Leader: Herbert A. Dallas, *Supervisor*
Vocational Rehabilitation
State of Massachusetts

(2) What is a Reasonable Case Load per Worker?
Leader: E. P. Chester, *Supervisor*
Vocational Rehabilitation
State of Connecticut

(3) To What Extent are Cases Reviewed After Closure?
Leader: Rufus Jarnagin, *District Director*
Vocational Rehabilitation
Buffalo, New York

THE GENERAL CONVENTION COMMITTEE

Continued from Page 20

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Do not fail to secure from the agent at your starting point the required certificate. Ask him about it today Do not wait until the day you start to New York City.

Turn in your ticket at the registration desk immediately upon your arrival at New York City. You can not purchase ticket at reduced rate for return trip, if your certificate is not properly validated at the Convention.

Do not fail to secure certificate, because unless 150 certificates or more are validated no one can secure reduced fare for return trip.

F. M. Smith, Secy

AMERICAN VOCATIONAL ASSOCIATION

Introduction to Vocational Education

The major problems and primary aims of vocational education are clearly and authoritatively presented in this book by Arthur B. Mays, Professor of Industrial Education at the University of Illinois. Particular attention is given to the significant relationships which vocational education sustains to other divisions of formal education and to the economic, social, and political institutions of contemporary society.

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Enrollment 2,300.

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T. Harry Knox, Principal,
Enrollment 1,000.

Textile Evening High School,
124 West 30th Street,
William H. Dooley, Principal,
Enrollment 1,400

Continued on Page 26

The SHIP

BETTER STANDARDS IN SCHOOL BUSINESS

TRUTH

Cruise of "The SHIP" to

September, 1931

Members of the
American Vocational Association

SHIP AHOY:

FOLLOWING the Thanksgiving holidays The Ship will set sail from her home port of Scranton, pointing her bow down the historic Susquehanna and then into Chesapeake Bay. After a short sail up the Atlantic Coast to the Harbor of New York, she will drop anchor in the busy Hudson River. The important engagement for this cruise will be the sixth annual convention of the American Vocational Association in the Hotel Pennsylvania from December 9 to 12 inclusive.

The Ship has been sailing the high seas for more than nine years, putting into Port for many important educational conventions. During this period it has never failed to call at the annual meetings of the American Vocational Association beginning with the first convention held at Louisville in 1926. This summer while The Ship was in dry dock her busy crew under the officers' orders made her ship-shape for your inspection.

The A. V. A. Cruise will not be without adventure, for we shall probably be attacked by a band of notorious pirates spurred on by their leader, Wahlstrom The Terrible. Our sturdy Crew knows how to give them battle for these same pirates have previously tried to raid our holds.

Several days will be required to transfer our wares to the S. S. Pennsylvania Convention Deck and place them on display. Every landlubber will find that a visit to our exhibits was as profitable as attending meetings or renewing old acquaintances.

On Thursday evening following the convention banquet our Crew will conduct a dance for the members of the Association. Any banquet speaker who talks too long will have to walk the plank. Several novel features are planned for this party and we promise you a merrie time.

On Friday afternoon the Treasure Chest will be opened at the close of the annual A. V. A. business meeting. Valuable prizes (well worth taking home) will be distributed to many lucky delegates.

What a strenuous and exciting week for us all. And members of the Crew, how glad we shall be to weigh anchor and set sail again. But, not until we have had our share of the spoils. By honest quality of wares, dependable service to our customers, steadfastness of purpose to our ideals, we hope to gain these educators as our friends and patrons. And then,—Bon Voyage.

RALPH NEWING
Captian

GEORGE FARNHAM
First Mate

THE SHIP, What is it?

At every A. V. A. Convention there are hundreds of members attending the meetings for the first time. To many of them, The Ship is almost as unfamiliar as it is unique. The "old timers" are always ready to explain the meaning of The Ship, but a word of explanation will also be timely now. Perhaps it will be best to quote from the Preamble to our Constitution.

In 1922 a group of commercial exhibitors at the Western Arts Association agreed that they should organize for the better conducting of exhibits at school conventions. At this St. Louis meeting the idea of heralding this group as THE SHIP was proposed, and this fealty of service came into being.

Ships through the ages have carried both the wares and the education of one people to another. The very name signifies deep faithfulness, tried loyalty, firm friendship.

"A social organization of members of reliable firms doing business in the educational field" identified those eligible for membership. The first election was held; a Captain, First and Second Mate, Log Officer, Purser, Broadcasting Officer were chosen.

In addition, the Exhibit Manager was heralded as "Pirate", and a few leading educators as "First Class Passengers."

The uniqueness of the name and the social benefits to members and educators have assured the growth and popularity of THE SHIP.

THE SHIP has sailed forward from the Port of Uncertainty, past the Shoals of Discouragement, through the Strait of Good Hope, into the Sea of Usefulness, and thus to the Harbor of Success, wherever a leading school convention is assembled.

THE SHIP conducts all prizes, dances, entertainments which are offered to members of educational groups where it docks. Its anchor holds fast to port while the educators come aboard to see new designs and learn of improvements in standard equipment.

The keel of THE SHIP *is Truth, her decks are colored with Happiness, her holds are loaded with Honest Wares. Her "sales" represent our activities in the school field. On her bow is the slogan, "We serve," and from her mast flies the pennant of Honor.*

THE SHIP maintains the ethics of the sea, to go to the rescue of any member of the crew in distress, to place friendship above self and greed, to inspire the ideals of shipmates that all can meet each day's work with clear conscience and keen mind.

"...to Little Old New York

JOHN CLAUDE
Second Mate

GORDON JAMES
Purser

WILLIAM NIGHT
Deck Officer

FRANK PHILLIPS
Commodore

OFFICER PERSONNEL

CAPTAIN, RALPH NEWING
International Textbook Co., Scranton

FIRST MATE, GEORGE FARNHAM,
McGraw-Hill Book Co., New York

SECOND MATE, JOHN CLAUDE, JR.,
Bruce Publishing Co., Milwaukee

LOG OFFICER, PAUL GOWARD,
School Arts Magazine, Worcester

PURSER, GORDON JAMES,
American Crayon Co., Chicago

RADIO OPERATOR, DUDLEY FULL,
Dudley Lock Corporation, Chicago

STEWARD, WILLIAM MILLIKEN,
Binney and Smith Co., New York

Since the organization of The Ship only three men have served as Captain. The Crew has conferred the honorary rank of Commodore on each of the two former Captains when they retired from office.

COMMODORE FRANK PHILLIPS,
American Type Founders Co., Jersey City

COMMODORE WALDO WRIGHT,
International Correspondence Schools, Scranton

The Manager of Exhibits for the American Vocational Association is Pirate L. W. WAHLSTROM, FRANCIS W. PARKER SCHOOL, Chicago.

FIRST CLASS PASSENGERS

PAUL S. CHAPMAN,
State Director of Vocational Education, Georgia

R. L. COOLEY,
Director, Milwaukee Vocational School

L. H. DENNIS,
State Deputy Commissioner of Education, Pennsylvania

E. A. LEE,
Director of Vocational Education, University of California

The Steering Committee is comparable to the usual executive committee. The Chairman of this Committee is Helmsman. There are eight members on this committee in charge of—

HELMSMAN, FRED GROSS,
Stanley Rule and Level Company, New Britian, Conn.

At the more important conventions where The Ship puts into port a Deck Officer is appointed to handle many of the details involved in the exhibit space, entertainment, and numerous other Ship functions at these meetings. The officer representing the Ship at the A. V. A. Convention is—

DECK OFFICER WILLIAM J. NIGHT,
International Textbook Company

• • •

OUR PURPOSE

The Crew of The Ship consists of representatives of reliable firms doing business in the educational field. We are conscientious in promoting our mutual interests, desiring to attain full recognition of the value of exhibits at educational conventions, to provide prize awards and fitting entertainment at conventions, and to develop confidence and respect among school leaders and supervisors for the guidance and counsel of our members on educational equipment.

Several hundred business firms are represented in our membership, but each member joins as an individual and not as a representative of his company. The Crew personnel hails from Maine to California and from the Great Lakes to the Gulf.

Our organization permits considerable flexibility and The Ship frequently docks at the same time with two or more conventions. In fact, we are always subject to call, even on the high seas, as many educators have sent wireless to us when there was some special service to render. A large percentage of our Crew was successfully engaged in the professional before entering the commercial side of education which enables us to cooperate with you more intelligently and effectively.

Each captain has endeavored to keep The Ship on its true course, never using the influence of the Crew arbitrarily or for selfish gain, but always ready and alert to serve and promote the best interests of education at large.

The Ship! Long may she sail!!

RALPH NEWING, *Captain.*

"STOP AT TOITY TOID"

or How to Salute a Taxi Driver During the A. V. A. Convention

WALDO WRIGHT

LUNCHEON was being served in the mooring mast of the Empire Building. A sou' sou' easter was swaying the tower and the gale-velocity arrow was dancing around like Al Smith kissing babies at a garden party.

At the head of the table Captain Ralph Newing sat polishing the two brass onions on the collar of his tuxedo. Below, New Yorkers in the form of black dots stirred through the cross-word puzzle that was Manhattan.

Far from the maddening crowd the Ship was deciding how to dock, who would set up the displays, who was to put together the entertainment. Pirate Wahlstrom paused in the middle of a sentence and pointed across the room.

There at a side table sat Hendrick Hudson and the Chief of the Leni Lenapes. Hendrick was reading a folder in Yiddish,—"Night Boat to Albany." He turned to the Indian: "Und yust to denk, you vant dwenty-vour thallers vor efferdings. I tell you dis island vill neffer be vord id."

For once Hendrick was right. In fact, he was away ahead of his time. It reminded us of that letter Captain Kidd wrote from here to the folks back in Savannah: "Ye village of Amsterdam maketh me weary from much looking. Everywhere is ye nimble yellow-cabbe, mistakenly called handsome. This Pennsylvania Hostelry, my good Dame, is quite the berries. Prithee parcel post my linsey-woolsey night cap, as ye dank Hudson river, or perchance ye confounded radio earphones, maketh my head to ring quite merrie of a morning. Yr. obdt. svt. Kidd."

But to the point, if any. Making a dead reckoning, without benefit of Bowditch, it will be a right pert convention. Our square rigger will open as a Show Boat from keel to royal pennant. If Wilkins can pilot a crazy one-dollar submarine under the North Pole it is up to the Crew to bring the Ship up Broadway without loss of a brief case or our American accent.

Why are we so sure of doing that? Native sons, dear people, native sons! First, there is George Farnham, our stately First Mate, in natty blue to welcome you to the portals of the new McGraw-Hill Building. Commodore Phillips has slung a cable over from Joisey City to show you their plant. In fact Merritt Haynes has a lot of typical surprises.

Then if it's New York—past or present—ask Ed Cherry. Ed has promised to be Master of the Treasure Chest, which assignment means another wealth of interesting prizes.

New York from the Battery to 186th Street is a string of small shops, night clubs, and places to eat. After a week of this food, you'll realize that it's too bad you have only one stomach to give for your country. One of the home economics teachers has asked that you save all your asparagus ends for her class in hooked rugs.

Dr. L. A. Wilson of the New York State Department has promised the Ship to spin a program that will bring an attendance exceeding any previous A. V. A. meeting. The Ship takes Dr. Wilson at his word.

Miss Florence M. Marshall and Miss Clara L. Krauter will render a ditty, "Come Over to Our House". Ed Berman has hinted that he will give Miss Krauter preference of the encore. Naturally, Ed favors N. J. although most of us are O'Leary of his motives.

President C. M. Miller of the River Dee and erstwhile Kansas, has been drafted to lead the grand march the night of the banquet.

Paul Chapman writes that a young thing recently popped into his office and asked to see the Director of Agriculture. When quizzed as to the nature of her interest she said, "A geranium of mine isn't doing so well."

Treasurer Charles Sylvester was observed painting at his summer cottage. In a few weeks he will have the fishing pole completely shellacked.

Recently Anderson of Delaware was taking Bauder of Philadelphia around the Dupont Course in Wilmington. Now it seemed to be Bauder's off day, and a good bit of turf and dust were flying.

"How do you like the links?" asked Anderson.

"Taste better than the ones at Cobb's Creek", commented Bauder, wiping the dust from his lips.

L. H. Dennis, our gracious First Passenger, has consented again to introduce the Ship entertainment in his native Patrick Henry manner. Three long "rays" for Dennis and let 'em ring out, Crew. George Frazee has wired in reservations for front row. He added that grapefruit still manages to get into the public eye.

Dr. Bill Warner, who is building bigger and better industrial arters at Ohio State, put in a long distance call to Isaac Newton to find out if the law of gravitation has been repealed. The occasion—his flight from New York to Columbus.

Some editorial slip called Ray Fife a Buckeye. Personally, I prefer to remain a Presbyterian.

Fred Bishop is playing better golf since his doctor ordered him to take more iron.

Have you read John Claude's new book. "How to String Along a Zither Player", based on incidents of the enterainment last year at Milwaukee?

Herb Heilig with his capable suavity warns New York that Wisconsin will maintain its lead in life memberships.

Walter Kane as a bachelor has a right to his opinions. "I prefer Blonds because of the light overhead," is the way he sizes up the enigma.

Once for all, The Ship wants to caution you against pooh-poohing Purdue to Dr. Z. M. Smith. Any violators will walk the plank, Smith's a friend of ours.

In a signed statement the member from North Carolina avers that he, H. L. Stanton, "started life by being born on his first birthday." Are you ready for the question? Ye-ah. As a life member, isn't he due one year's discount? Poiheps, Poiheps.

This year thru the courtesy of Station ICS, dynamic Bill Night is our Deck Officer. He is a master entertainer and whatever he trots out at the Friday afternoon entertainment had better be good. Bill is an amateur movie fan and sings "I'll Putcha Pitcha in the Paper" with deep feeling or sumphin'. No, Annabelle, this is not Barnacle Bill the Sailor.

Miss Margaret M. Edwards vouches for this. There's a pupil down that way so enthusiastic over a vegetarian diet that when she cannot fall asleep she counts carrots jumping over a fence. Put an egg on my spinach, waiter, if you don't mind. And bring Walter Ringer a steak.

Draw circles around those magic days of December on your desk pad. Bring your red flannels for the cruise of The Ship, as Captain Kidd suggests. Note: This does not apply to Californians who come thru the Canal.

Come one, come all. See your friends, exchange ideas, listen to outstanding vocational leaders. Visit the Deck, see the new developments in tools, books, shop materials. On to New York and bring a life member, yourself of course.

And for goodness sake, don't expect any New York Cabbie to understand you unless you say, "Stop at Toity Toid, Bozo." He will eat from your hand, or sumphin'.

Waldo Wright
Commodore The Ship

A.V.A. Life and Memorial Endowent Membership

Value

Value to vocational education—The American Vocational Association is the only organization in the United States that is concerned exclusively with vocational education. Life membership in the organization is the one opportunity for men and women to unite their efforts perpetually in promoting, establishing, and maintaining vocational education service in agriculture, home economics, trade and industry, commerce, part-time and continuation classes, civilian vocational rehabilitation and the like.

Value to the association—The life and memorial endowment membership fund insures stability and permanence to the Association. It is a resource upon which exact financial obligation can be imposed. The life membership personnel constitutes a high grade active group that can be depended upon to initiate and pursue to a successful conclusion programs of vocational educational service that would not otherwise be provided for wage-earners. This personnel is the central force in which there may inhere and from which there may emanate the stabilizing and directing influence that might determine and govern the activities of the great body of annually enrolled members.

Value to the individual—Life membership in the American Vocational Association definitely and permanently associates the possessor with others of like interests. Through this association of kindred minds there accrue to each an abiding satisfaction unattainable otherwise.

This kind of appreciation of professional spirit is of inestimable value to the person who holds the life membership, in that life interest and activity promote growth and prevent decadence and atrophy.

Plans

Life membership plans—One can become a life member in the American Vocational Association by the payment of one hundred dollars. This payment can be made on the following plans:

1. Payment of one hundred dollars.
2. Payment of ten dollars cash and the balance in nine equal annual installments.
3. Payment of twenty-five dollars cash, and the balance in three equal annual installments.

A school may become a life member under either of the three plans.

Pamphlet Available

Write the secretary of the A. V. A. for copies of the pamphlet on the purpose, value and plan for life and memorial endowment membership. This pamphlet will be supplied in quantity without cost to anyone upon request.

Life Membership Acceptance

To the secretary of the A. V. A.:

It is with pleasure that I accept life membership in the American Vocational Association, Incorporated. I do this with the understanding that my life membership fee becomes a part of the permanent fund of the association and that interest therefrom will render service to vocational education for all time.

I am enclosing check for $100.00 or 25.00 or $10.00. I will pay the remainder in 3 or 9 annual installments.

Name..... Title.....

Post-Office..... State.....

Date.....

Mail to: Z. M. Smith, Secretary A. V. A., Room 225, State House, Indianapolis, Indiana

Brooklyn Evening Trade School,
Flatbush Avenue and Concord St.,
George C. Wigle, Principal,
Enrollment 2,300.
Bushwick Evening Trade School,
Irving Avenue and Madison Street,
Charles B. Howe, Principal,
Enrollment 900.
Jamaica Evening Trade Schools,
170th and Jamaica Avenue, Queens,
Long Island.
Louis Margolis, Teacher in Charge,
Enrollment 250.
Long Island City Evening Trade School,
Wilbur Ave., & Academy St., Queens,
Long Island.
Wallace L. Cremin, Principal,
Enrollment 400.
Curtis Evening High School,
Industrial Department,
St. Marks Place, New Brighton,
S. I.
William Flanagan, Principal,
Enrollment 150.
Tottenville Evening High School,
Summit Avenue, Tottenville,
William H. David, Principal,
Enrollment 60.

Industrial Courses Offered in Evening Schools

Applied Electricity
Automobile Electrical Equipment
Batik Work
Bricklaying
Blue Print Reading
Book Illustration,
Broad Silk Mfg.
Cabinet Making
Carpentry
Commercial Design
Commercial Photography
Cooking and Catering—Commercial
Costume Design
Costume Draping Design
Costume Life Drawing
Cotton Converting
Cotton Manufacturing
Cutting and Fitting
Dietetics
Draping
Drawing, Dental
Drawing, Architectural
Drawing, Freehand
Drawing, Mechanical
Electrical Installation
Embroidery Machine Operating
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Freehand Illustrating
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Fur Operating and Cutting
Fur Design
Garment Grading
Garment Design, Ladies
Garment Design, Men
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Industrial Chemistry
Industrial Design
Interior Design
Jewelry Design
Lamp Shade Manufacturing
Ladies Tailoring
Laundry Work (Commercial)
Linotype Operating
Linotype Repairing
Lithograph Transfer
Loom Fixing
Machine Shop Practice
Manicuring and Shampooing
Marble Cutting
Marble Polishing
Mathematics (various trades)
Metal Ceiling Erection
Mill Wrighting
Mosaic and Terrozza Work
Mural Decoration
Novelty Work
Ornamental Iron Work
Ornamental Plastering
Offset Presswork
Painting and Decorating
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Show Card Writing
Special Machine Operating
(Needle Trades)
Steam Engine Operating
Steam Fitting
Straw Machine Operating
Textiles, General
Textile Chemistry
Textile Design
Terra Cotta Drawing
Terra Cotta Modeling
Tool Making
Trade Dressmaking
Trade Embroidery
Trade Millinery

ELECTRICITY

A Study of First Principles

E. E. Burns

D. VanNostrand Co.

In this book Mr. Burns, who is an instructor in Physics at Austin High School, Chicago, Illinois, has explained the fundamentals of electrical theory as they apply to the electrical power of all kinds in use today. Simple analogies have been drawn which help the student to understand the principles. The mathematics of simple electricity are explained and the book is well illustrated.

THE PLACE OF VOCATIONAL EDUCATION IN A UNIFIED STATE PROGRAM OF EDUCATION

Address before the Vocational Division at the West Virginia Education Association, William C. Cook, State Superintendent of Free Schools.

Vocational Education has a very definite and highly important place in a unified State Program of Education for West Virginia. No one type of Education can meet the needs of the increasingly complex social and economic world in which we live. The demands upon the average individual are greater than ever before and will continue to be so.

The rich natural resources of West Virginia offer a challenge to the State to become a leader among the States of the Union industrially. In order to assume this position of leadership worthily among the States, West Virginia must not only produce a wealth of raw materials but must also fashion these into a diversity of finished products such as only trained craftsmen can produce. Massachusetts is a classic example of a state rugged in topography, severe of climate and not richly endowed with natural resources. She early realized the importance of a trained citizenry-made provision for public education for all, and now takes her place with the best that we have in this country.

An increasing population of industrial and commercial workers means an increased demand for food, clothing and shelter materials, many of which our rural population can produce to advantage, and live in the independence and happiness afforded by country life, if properly trained to do so.

Increasing population whether it be urban or rural means homes. Much of the efficiency of the worker whether in story or factory is dependent on his home life. The wise care of the growing child, the development of proper personality traits, the orderly business management of the household, wise provision for wholesome recreation in the home, all effect the efficiency of the worker and incidentally the prosperity of the State as a whole.

Economic readjustment will always take place so long as this State and our nation continue to grow. Whether these adjustments are unforeseen, abrupt and painful or are anticipated, gradual and relatively painless depends in great measure upon the previous training of all the people and upon the degree of opportunity for continuous education training whenever needed to meet changing standards and new situations as they arise.

Since any chain is no stronger than its weakest link, it is to be assumed that an adequate life program of Education for the State of West Virginia will include all that are able to profit in any measure by this training, when this training is adapted to the needs and capacities of the individual.

Less than a quarter century ago, we thought of a state program of Education which consisted of a more or less effective public elementary school where reading, writing and arithmetic held dominion. A four year high school for those so economically fortunate that they could attend (either for so-called cultural or general training reasons or perchance as a preparation for college to continue their general training or prepare for one of the professions.) Little or no thought was given to the vast multitudes who dropped out of school at the end of the sixth, eighth and tenth grades, and at the end of the high school. All progressive school men are realizing that we cannot afford to fail to provide educational opportunity for this great group who have left the school and who are carrying on the work of the world. As educators we are gradually beginning to see that our program of secondary education can no longer concern itself alone with those who wish simply a broad general education or one preparatory for college entrance. The butcher, the baker, the candlestick maker's sons and daughters are now coming to our secondary schools in great numbers. From these will come our home makers, coal miners, mechanics, salesmen, stenographers, plumbers, electricians, farmers, as well as doctors, lawyers, engineers, and teachers.

There is an old Japanese saying to the effect that "The world stands by to let the man pass who knows where he is going." We believe that our public schools can do more than they are now doing to assist the great throngs of young people who leave our elementary and secondary schools each year to enter upon vocational pursuits, make an intelligent selection of a vocation and provide some training that will enable them to do the work required, get satisfaction out of doing it, and grow with the vocation making adjustments and changing conditions easily and quickly. The greatest handicap in American industry and in fact in most vocations today is the untrained worker who cannot see beyond the immediate operation that he is preforming. This produces dissatisfaction, disgruntlement and general inefficiency. Our present and future wage earner is entitled to a training that will enable him to become proficient in the manipulative and managerial aspects of his work and to see in correct perspective its relation to the world in which he lives. The school is the only organized public agency that is in a position to cooperate with industry in the development of an adequate program of vocational education. It is only through the sympathetic counsel of worker, employer and school man that this satisfactory program can be maintained.

The failure to develop an adequate program in the past has been due, in a large measure, to the passive interest of the average school executive who either thinks that we have done our full duty when we made available the ordinary public school program or else sees a new thing which by very nature requires administrative adjustments that he is unwilling to make until he has to do so. An adequate program of education for all in West Virginia pre-supposes a practicallized, vitalized, efficiently operated elementary program where trained teachers under skilled supervisors give the training that should be the heritage alike of every West Virginia boy and girl. The upper elementary grades or junior high school will provide a diversity of educational opportunities adapted to the interests, needs and capacities of the pupils. There will be abundant opportunities for exploration and try out. Frequently practical arts education is confused with vocational education. Practical arts courses in the Junior high schools such as home economics, agriculture, printing, woodworking, and the like are designed (a) to provide activities that are worth while in themselves and as spare time activities. (b) To provide activities that are worth while in order that we may better appreciate he who works with his hands. (c) To provide vocational exploratory and try out opportunities. General courses in agriculture, home economics, commerce, and manual arts in both junior and senior high schools are designed in the main to perform these educative functions.

Vocational education on the other hand provides specific training for the individual who is already engaged in or has definitely decided to enter a particular vocation. We may reasonably expect a unified state program of education to provide both general and vocational opportunity of less than college grade for youth of high school age and adults as well.

Our colleges and university will continue to offer both general and vocational training on a collegiate level.

The passage of the Smith-Hughes Act in 1917 made available federal funds to be used cooperatively with the several states in developing a program of vocational education of less than college grade in the fields of agriculture, home making, trades and industry. This law specifically states that all federal funds must be matched dollar for dollar by state or local funds. The instruction must be adapted to the needs of persons 14 years of age or older and must fit for useful employment. West Virginia immediately accepted the provisions of this act and has set up a state plan of work which has been approved by the Federal Board for Vocational Education. Sixty-two (62) departments of Vocational Agriculture are now operating in the high schools of the state. Most of these are part-time departments. Within the next ten years, we may reasonably expect these departments to increase to a hundred or more with a full-time teacher in charge, responsible for developing and carrying out a program of regular day schools for those that are in school, part-time classes for youth of high school age who are not in school and evening schools for adult farmers.

Home making education is provided in 31 regular day schools for those girls who are now engaged in home making activities and who will in a few years, head homes of their own. Evening classes are rapidly developing for adult home makers. General home economics should perhaps always form a part of our secondary program of education for its guidance, appreciation and general training values. We should, however, reasonably expect a great increase in vocational home making departments with programs for regular day, part-time and evening classes.

We have made a small beginning with an all-day trade school at Wheeling. With less than 100 pupils, it seems small when compared with the new Connally Trade School at Pittsburgh which cost two million dollars and will accommodate 1600 pupils. Certainly West Virginia should look forward to institutions of this kind, either all-day or cooperative part-time in our great industrial centers of Wheeling, Huntington, Parkersburg, Charleston, Bluefield and perhaps others. Evening schools classes for adults have made a substantial beginning in these and other centers. There is crying need for vocational courses such as retail selling and a host of others in the field of commercial education. If pending Federal Legislation becomes law, we will be in a position to develop this.

Evening school classes for miners are now being conducted in fifty centers. This cooperative service affecting one of our largest industries should be expanded in scope and improved in efficiency. Regular day vocational classes for boys of high school age who are now working in and about the mines on Saturdays and during vacations and who intend to become miners in a few years, may well be a part of our future program.

We have reached a place in the

development of a program of vocational education for West Virginia where its efficiency and further development is largely dependent on additional Federal Funds and adequate support of these Federal Funds by State Funds.

During the past 13 years, practically all matching of Federal monies for this work has been done by the local communities.

That this has been done despite the fact that it has been increasingly difficult for the local communities to raise sufficient revenue to support the rapidly growing school system through an antiquated system of taxation, is direct evidence of the value that the consumer places on specific instruction for a vocation.

Let us now turn to some of our sister states with whom the boys and girls and men and women of West Virginia have to compete.

We do not have data showing state funds available in the several states for the current year. We do, however, have their expenditures for the year ending June 30, 1929. During that year, Pennsylvania, our neighbor to the north, expended $854,351 state money and $531,897 Federal Funds, an approximate ratio of 8 to 5 or over one and one-half as much state money as Federal.

Massachusetts $979,337 — $247,157, nearly four times the Federal;
New York, $1,406,785 — $671,215, more than double the Federal;
Alabama $278,651 — $151,305, nearly double the Federal;

New Jersey	$256,143 — $203,727	
Ohio	290,063 — 373,381	All
Virginia	$142,671 — 154,902	Approxi-
North Carolina	161,112 — 170,543	mately
Georgia	138,519 — 194,569	50/50

As we have said before, West Virginia has available for use in 1930-31 $30,000 State money and $116,761 Federal Funds, which represents but one-third dollar for every Federal dollar available. Certainly West Virginia cannot afford to do less than match dollar for dollar all Federal Funds for this work. We should bend every effort to secure legislation to this effect at the next session of our legislature.

We are proposing to the next session of the legislature a program of equalization and relief for the public elementary and high schools of the state that should be of vital interest to every man, woman and child in West Virginia. I do not intend to discuss this program in detail at this time. This I will do before the General Session tomorrow morning and before the house of delegates in the afternoon. Briefly, this program is as follows:

It is proposed that the State shall provide from indirect sources approximately one-third of the cost of the total stated above.

1. The first part of this program consists of a General Relief Fund to be distributed on the following basis:

	Per Teacher
(a) Elementary teachers salaries	$300
(b) Elementary maintenance	75
Total	$375
(c) High School teachers salaries	450
(d) High School maintenance	125
Total	$575

There are 12,512 elementary teachers in the State at $375 per teacher equals $4,692,000.

There are 3,444 high school teachers in the State at $575 per teacher equals $1,980,300.

The term teacher as here employed means any person legally paid out of the elementary or high school teachers' fund.

2. The second part of this program is an Equalization Fund of $1,500,000. This fund will be sufficient to enable every board of education in the state to provide the present elementary minimum school program at a levy of 50 cents or less for elementary teachers and maintenance fund combined.

It is understood that each individual district would need to levy a sufficient amount to take care of its exonerations, discounts and delinquencies in addition to the above 50 cents.

3. The third part of this program is a creation of a fund for the purpose of stimulation of Consolidation of Schools. We recommend the sum of $500,000 for this purpose.

4. The fourth part of this program is a fund for the purpose of School Administration of $225,000. This fund is for the purpose of employing a sufficient number of well-trained and well-equipped superintendents and supervisors on the field to see that the State gets full returns on the money expended in this program. It is understood that these administrators are in addition to the present force throughout the State and will work in the territory which is not now under close administration.

The third and fourth parts of this program are to be administered by the State Board of Education and distributed in accordance with a formula to be agreed upon.

We know that this program will enlist your hearty active support. The future of our educational program on all levels is dependent on adequate financial support by the State.

In conclusion I wish to assure you of the interest of the State Department of Education and my own warm personal interest in the program of vocational education in West Virginia. We believe that we are on the right track, that we have made material progress in this field. Vocational education is a very vital part of a unified program of education for West Virginia and will continue to grow in usefulness and efficiency.

GUIDANCE AND VOCATIONAL TRAINING OF CHILDREN

Continued from Page 6

finally the commercial or industrial plant in the care, restoration, education, vocational training and employment of the child.

Guidance, or whatever you want to call this business of "Human engineering", is the service that takes hold of the handicapped child, finds out his needs, and with adjustment to social and economic life as the goal—lays out the course of action and pilots the child through the course. It goes into the home and counsels and advises with the parent—it leads the child through the hospital and the convalescent home—it tells him his educational needs and sees that he gets it. It is guidance that lights the fires of his ambition and inculcates in his mind the need for development of desirable habits of work and behavior. It is guidance that helps him to select his employment objective and leads him through the process of preparation, and it is guidance that ultimately helps him to get adjusted into the job for which he has been prepared.

You see, therefore, that it is guidance that lays the foundation of employability and builds upon it, using the home, the hospital, the school, and the commercial or industrial plant as the workshop. It is the central interpreting concept of the whole job. Without a continuous, responsible guidance, work for handicapped children is patch-work, a little spectacular restoration here, a special class there, a placement bureau for handicapped children somewhere else. That almost represents the situation as it exists in this country today—Patch work.

In this concept of guidance we see it assuming a different role at different times and stages. At one time it is social guidance, at another, educational guidance, at another it is vocational guidance—but if we keep in mind the elements of employability it is easy to understand the necessity of shifting emphasis from time to time.

Now, let us consider some of the essentials of an effective and efficient guidance service to handicapped children. The *first* essential is, of course, a competent counselor. I haven't time to to go into the qualifications of such a person. Suffice it to say that a clear thinking head and an understanding heart are the principal qualifications. The *second* essential is a complete knowledge of the physical, mental, social, and environmental status of the child. *Third*, a knowledge of the facilities available for providing the necessary services — care, cure, education, vocational training, and placement of the child. *Fourth*, the organization of these facilities so that they will respond

Continued on Page 31

OUR CONTRIBUTORS

RURAL PROGRAM OF A HIGH SCHOOL

CATO HIGH SCHOOL, CATO, N. Y.

The agricultural department of Cato High School sponsors several activities during the year for the rural schools of its patronage area. Early in the fall a two day fair is held at which the rural schools exhibit products from home projects of 4 H Club workers and other children who are not carrying on a supervised home project and exhibits of school work.

At the Fourth Annual Fair held in 1930 there were over 2100 exhibits and an attendance of 1,000. A loving cup is given for the best exhibit from each school.

During the winter months a prize speaking contest for rural school children is held. Each school taking part in this sends the winner of their local contest to the high school for a final contest in May. The rural schools also furnish one or two musical numbers on the program from each school represented. Prizes of $5, $2.50 and $1 are awarded by the agricultural department.

In January and February a short course in agriculture is held for the adults and for older boys not attending school. From ten to twelve sessions are held. Thirty-one individuals attended this year.

In May a Community Field Day is held, attendance this year 350. A loving cup is given for the school scoring the largest number of points in the athletic events.

4 H Club work is carried on in five towns of Northern Cayuga County. Enrollment has increased from 18 members in 1927 to 117 in 1930 with prospects for a large enrollment this year. There were thirteen active clubs in this area last year representing 21 rural schools and the local high school. Three rural engineering clubs are organized, which have had a 100% completion for four years. A member of the forestry club last year was chosen by the County Club Agent as one of the representatives on the Adirondack Forestry Tour sponsored by the Cayuga County Sportsman Association.

Three letters concerning activities of the department are mailed to rural teachers of the 53 districts of the five townships.

The department cooperates with the county farm bureau, many of their meetings are held in the agriculture rooms and the manager cooperates with the winter short course program. Boys attend many of the farm bureau demonstrations and tours.

A Rally Day for 4 H Club workers is held in August at the local high school. At the last rally day a health talk and a health film were given by a representative of the Dairymen's League, fifteen districts were represented by 75 club workers, to whom free ice cream was served by the agricultural department. The agricultural teacher is to have charge of the hand crafts work for boys at the County 4 H Club Camp in August 1931.

The Cato Aggies, the local club of F. F. A. took part in judging contests at Morrisville State School of Agriculture, at New York State Fair and the County Fair. They exhibited at the local school fair, County Fair and the Farm Bureau Seed and Crop Show at Auburn, N. Y. Cato Aggie members and 4 H Club members earned $100 in premiums at county fair in 1930.

An Achievement Day for 4 H Club members is held at Cato in October. A Potato Judging Contest was held in connection with this and silver and bronze awards presented to winners. Twenty six visits have been made to rural schools during the year and around 300 visits to 4 H Club workers.

C. A. ABBOTT

UNGRADED PUPILS

For three years I was a teacher of Printing in Probationary School No. 61, Brooklyn, N. Y. Boys, between the ages of nine and fifteen, were placed in my classes to be remoulded (rehabilitated would be the more appropriate term). What sorry wrecks these youngsters were! They had been misunderstood in the ordinary elementary schools, mistreated by book-taught and book-minded pedagogues, insulted before their classmates and finally placed in special or ungraded classes. Here, treated like young savages, they became problems in discipline and child management. These so-called ungraded pupils refused to learn, refused to obey, and finally were sent to reform schools or probationary schools.

I handled hundreds of boys of all creeds and nationalities. Some were brilliant, some unusually dull, while the vast majority were normal. I taught these boys how to set type and feed presses. But, above all else, I instilled within them the habits of honor, respect, obedience, independence, thrift and a desire for further education. These probationary pupils, the cast-offs from other schools, worked like galley slaves whenever they were given a trust to uphold. Many obtained positions in print shops; one, at the age of eighteen, is a foreman. Three boys, who did not know how to read or write, became quite proficient in those studies after several months. School to them was no longer a jail; it was a home where their principal and instructors loved and trained them. These ungraded pupils, through a trade, by means of a craft, through the "art preservative of arts," were reclaimed from the lists of the lost and the hopeless. Through manual instruction, vocational education, potential criminals became worthy citizens.

AUGUSTINE M. MILLS
Jamaica Continuation School,
Jamaica, N. Y.

THE NATIONAL EDUCATION ASSOCIATION SUMMER MEETING

The Vocational Section of the N.E.A. held a very successful and interesting session in connection with the summer meeting of the N.E.A. at Los Angeles last July. Dr. Z. M. Smith, State Director of Vocational Education in Indiana, was president of the Vocational Division and reports the following officers for next year:

President, R. W. Heim, State Director of Vocational Education in Delaware. Vice-president, J. B. Hobdy, State Director of Vocational Education in Alabama. Secretary, Julian McPhee, State Supervisor of Agricultural Education in California.

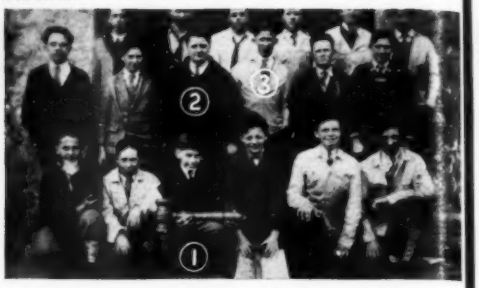
Boy Builders Club

VOCATIONAL DEPT. OF THE FEDERALSBURG HIGH SCHOOL

Federalsburg Maryland

LeRoy Hulliger

MOTTO: BUILD UP; NEVER TEAR DOWN



STUDY

WORK

COOPERATE

LOOK FOR THE SUNSHINE

AND PLAY A LITILE

June 12, 1931

A. V. A. News Bulletin,
Indianapolis, Ind.

Gentlemen:

We are sending you a picture of our Club members who are taking the General Industrial Vocational Course in our High School. All the members are freshmen.

On the second Tuesday night in each school month we have our regular monthly meeting. At this time we have a business meeting, a speaker, games, entertainment and refreshments. Our meetings are self contained except for the Speaker. Each member brings eggs, milk, sugar, etc. and the Home Economics Dept. makes the cakes or cream. We have several musicians, an artist, and several others in the club who arrange the program. Once a year the parents are invited to come out and they come.

The purpose of our Club is to help our members take advantage of the opportunity of going to school to study the related subjects and to have a better school attitude, or what our teacher calls shop concomitance. We are learning to cooperate, to look for the better things in life and to have a little fun. The block cuts on our letterhead were made up by LeRoy Hulliger. The president is small in stature but his gavel makes up the difference. We like our shop work and our related subjects--all of us have passed for the entire year. So far as we know ours is the only Club of this kind in Maryland.

Boy Builders Club,

Charles Fluharty, Sec'y.

CF/SEB
Enclosure
1 letterhead
1 clipping
1 club song
1 picture

Reference--
Mr. Charles W. Sylvester

OFFICERS

PRESIDENT, MALCOM OWENS 1
V. PRESIDENT, WM. HARPER 3
SEC-TREAS., CHARLES FLUHARTY 2
ADVISOR MAX CHAMBERS

AGRICULTURAL EDUCATION

We Will Pay a Dollar for a Question

THE QUESTION BOX

Problem 3—To what extent should a teacher of vocational agriculture answer calls made by farmers by going to the farm even though the farmer is not the parent of a student of vocational agriculture?

Submitted by Wm. J. Tucker, Hatfield, Pa.

Address the News Bulletin Editor, Room 225 State House, Indianapolis, Ind.

$5.00 will be paid for the best answer received by October 10.

We Will Pay $5.00 for an Answer

PROBLEM 2.

To what extent should a teacher of agriculture participate in the church and civic organizations of his community?

ANSWER

One of the best definitions that Webster gives for "community" is: joint ownership or participation. This signifies that a community has certain interests comon to all. Nothing within the bounds of that community is isolated from each member of society therein. The business, the sports, the clubs, the churches, the schools, the roads, the homes, the hospitals, the flies, the crops, the cleanliness— in fact everything is of interest to every single individual in the community.

The Minister of religion, no matter how well trained he is in theological and spiritual lines, must recognize social and economic conditions of his people. Heredity, environment, and "social tendencies" must be considered. The book salesman must bear in mind the educational and cultural past of the people in selling them books. The merchant must consider people's social activity in buying clothes to sell them. Everything is inter-linked with everything else. And just so is it in school.

No school can be studied within the limits of its campus and walls. Homes must be studied. Problems of morality must be understood. And neither must that school be asked to do everything for the child. The community leaders ought to rid the place of mosquitos and pests. Homes should give them well ventilated and comfortable places in which to study and sleep. Wholesome food must be served. Places of amusement ought to provide wholesome recreation and helpful sports.

But before answering the question as to the place of an agricultural teacher in the church and community organizations let us see the duty of a merchant in that same place. Or better still, the place of a clerk in one of those merchant's stores. He is hired to sell merchandise, to keep the shelves cleaned up and arranged, to make the exhibits attractive, to keep the place clean, and to bring all the customers there that he can. And these things should be done. Then is he done? Is that all that he should do in his community? You say, No! Correct. He has a duty at home. There are children, a wife, and friends in that home. He must serve there. But at that is he done? Again we must say, No!

This man's home is protected by the community. His children are educated by taxation. Some man living a thousand miles away but owning land there pays taxes to help educational work in this place. Railroads pay taxes, and the State Equalization Fund applies aid. This man's taxes can not be much yet he must help. He must over-balance this financial part with interest and with work. So he works in organizations that help the school and community. He has a duty to help in church work for churches meet a need in the life of people. He should promote the charity of the community. It's as much his duty and opportunity as anyone's.

We can all agree then, that the clerk has something to do besides stay in that store all the time.

May we not expect the same responsibility to be accepted by the teacher of agriculture? If the school were not associated with everything in the community he would have no responsibility outside of his class room or laboratory or experimental fields. But the school is allied with everything in the community. Schools are for the purpose of helping to lead people into fuller living and into being more appreciative of the work of others. But now we ask, to what extent should the teacher help?

No cut and dried answer can be given. Much depends upon the man, much upon the community and its needs for additional leadership. But one thing sure. An Agricultural teacher should first realize the need for a student's all-round development. Many times we start at the wrong end of the season. We want to start by reaping or by "scratching" the fields before we prepare and understand what will take place. Just as it takes rain, sunshine, plowing, bedding up, and hoeing to raise corn just so it does in rearing young people. The things necessary must come from various organizations. The school can do a lot and will afford a man a place to reach them in one way. But there are other places where the other sides of a person's life may be reached. Merely coming in contact with people in a classroom is like all sunshine and no rain and no plowing on a field. The first step for the teacher to take is to realize that he must live an all-round life. In other words his agricultural interests must not be all. And in addition, these interests must attach themselves to other things. Church and school must relate themselves, sports and work must have an armistice, civic and literary clubs and business must be on speaking and working terms together.

A teacher should participate in church and civic organizations to such an extent that people can see that the teacher is interested in the full development of his students. Where leadership in such will not detract from his primary duties and where leadership will have a special meaning to his

community he should participate. But his activity must not be to reveal his interest merely. It must be so genuine that he can lose himself in this work. Otherwise it will be boresome and will lack a positive element.

I would answer the question finally in these terms: A teacher of agriculture should participate in church and civic organizations to the extent of showing his heartiest interests in the full developed life of the community in which he is serving. He should take activity sufficient to become a part in the whole sided life of his community. He should participate enough to feel a part of every part of the community interests. He must participate enough so that he will fit into the whole program of his community. Then it will not be his merely to "demonstrate" or to "judge" but it will be his to lead, to associate with other interests, and to be a factor in the full living of his people. It will be joint ownership and participation along with others in his community. He will still be a specialist in his field, but just as the lawyer, doctor, minister, clerk, farmer, and salesman fit into the whole framework so will he.

Paul Vernon Galloway
Yale Divinity School 1929
Joiner, Arkansas

ANOTHER ANSWER

The question of the extent a teacher of Vocational Agricultural should participate in Church and Civic organizations may be considered from several angles. Judgement in this matter, from whichever angle of approach, must be predicted upon the fundamental purposes and aims of education and especially Vocational Education in Agriculture.

As long as the participation in Church and Civic organizations aids the accomplishment of these purposes and aims a teacher of Agriculture should take part therein. On the other hand, when participation begins to interfere with the accomplishment of said aims and purposes, it is time for the teacher to reduce the time devoted to such organizations. The question now arises, when does participation help and when does it hinder the realization of the aims and purposes of Vocational Education in Agriculture?

The fundamental purpose of Vocational Education is to train individuals to successfully follow an occupation. The chief objectives of Vocational Education in Agriculture are working proficiency in an Agricultural occupation and worth while living in a rural community. The farmer works, not for financial returns, but for the satisfaction of life that money will buy, and such other satisfactions of rural living for which there are no material measures. Furthermore the farmer lives not to himself alone, but a cooperator with his neighbors in forming a rural community. Studying this question of participation in community activities under these conditions it is evident that the teacher of Agriculture may be teaching as much by his example as he is by formal teaching methods. The proper balance between them is the important consideration for the teacher just as the proper balance between working for himself and aiding in community activity is important for the individual farmer.

A few examples of actual occurance may help to illustrate undesirable as well as desirable relationships in this matter. One teacher of Agriculture, in a strictly rural community, has no classes except two all day classes in Vocational Agriculture. He had no part time or evening class program and pleaded lack of time to put on such work. He found time, however, to attend choir practice, sing in church service, teach a Sunday school class, be a member of degree teams in two fraternal orders, take part in a service club's activities and act as local leader of the Boy Scouts. Another teacher with but all day classes in his program, spent half a day, five days a week for five summer weeks teaching boys in a vacation bible school to make playthings. A third teacher, with but the all day program, coached athletics, played semi-professional baseball with the town team, never attended church activities of any kind and gave very little time to community activities. Many boys of his classes had a derisive attitude towards church and community activities. A fourth teacher with a Vocational program that included all day, part time and evening class work, and served a fairly high percentage of the farmers of the community, attended church regularily, was a member of the Agricultural committee of the local chamber of commerce, a luncheon club and a fraternal order. He was respected in his community for both his training program in Vocational Agriculture and for the example he set as a member of the community.

The primary responsibility of the teacher of Agriculture is a good training program in at least two if not all three phases of Vocational Agriculture. Unless it is quite evident that participation in church and civic organizations materially aids in establishing and carrying out such a program, such participation should not take any considerable portion of the teacher's time and energy. He must, however, take a sufficient part in the activities of the community, to emphasize, to the boys of his classes, the necessity of their taking part in the building of a wholesome community life.

Graydon E. Klipple
Ft. Collins, Colorado.

Wisconsin Future Farmers of America are preparing for the national public speaking contest. The state has been divided into 24 districts. The winners in these districts competed in five sectional contests held in May. The state contest will be held at the Northern Wisconsin State Fair at Chippewa Falls. Prizes of $20, $10, and three of $5 each will be awarded by the Fair Association. In addition, the Wisconsin Agriculturist and Farmer will give an F. F. A. State Award Plaque to the chapter having the winning candidate and an F. F. A. banner to the chapter having the second place contestant.

Vocational boys participating in a statewide poultry judging contest at the University of Maryland

HOME ECONOMICS EDUCATION

We Will Pay a Dollar for a Question

THE QUESTION BOX

PROBLEM 3

Problem 3—Miss Brown is a beginning teacher of Foods to ninth grade girls. Books will not arrive until ten days after school opens. What would you have her do until the books arrive? Address the News Bulletin Editor, Room 225, State House, Indianapolis, Indiana.

$5.00 will be paid for the best answer received by October 10.

We Will Pay $5.00 for an Answer

FINDING AND MEETING THE NEEDS OF THE WORKING GIRL IN A LARGE CITY

By HATTIE E. ANDERSON

Assistant Division of Voc. Teacher Training and Research, Milwaukee Voc. School.

Everywhere in the western world rapid changes are taking place not only in the field of science and invention but also in education. There has been an increasing belief that educational procedure should be based on objective facts. This has led educators to look to the students themselves for educational needs. In this paper, I shall outline briefly how one school, namely, the Milwaukee Vocational School, has attacked the problem of discovering and meeting the needs of working girls in a large city.

In order to understand our problem better, the school has been gathering general information about the students attending it. We needed facts relating to their home environment, their work, and other data that would help us to determine their needs. With this thought in view, three intensive surveys have been made—one in foods, one in clothing, and one in reading. The foods survey covered a group of 592 families; the clothing survey, a group of 1318 girls; and the reading survey, the entire student body. In each survey questionnaires were used. They were filled out by the students with the aid of their parents and returned to their teachers. The results then were tabulated.

Foods Survey

As was stated previously, it is necessary for those who organize or revise a curriculum to have at hand certain facts about the students and their environment in order to know the needs of the young people they are going to teach. For instance, when the foods survey was conducted, general information about the family life and conditions of the vocational-school students was collected, along with the other data needed for intelligent revision, including such facts as:

1. The birthplace of the parents.
2. The size of the families.
3. The ages of the children.
5. The earnings of the children.
6. Expenditures for food.
7. Other interesting data pertaining to the purchase of food, budgeting of family income, responsibility of the girls in the preparation of food in the home, and the use made of the instructional material received at school.

A need of specific help along nutritional lines and menu-planning was evidenced by a careful study of a week's menus presented by the group. It was decided that our new course of study should include:

1. More information as to the value of whole-grain breads as compared to those made from refined flour.
2. More emphasis upon the greater use of breakfast foods as an economical measure.
3. Value of fruits and vegetables prepared in a variety of ways.
4. Place of sausage in the diet with emphasis on how to select and prepare it for the table.
5. Value of glandular organs in the meat portion of the diet prepared in attractive and palatable dishes.
6. Use of cheaper cuts of meat prepared in other ways than that of frying.
7. Proper use of sweets in the diet.
8. Wider use of both homemade and canned soups, as well as chowders.
9. Greater variety of ways in which to use left-overs.
10. Specific help in budgeting and marketing earlier in the course.
11. Correct methods of preparing foods as compared with the common practices.
12. Greater use of milk and milk products in the diet.
13. Use of more illustrative material in the classroom.

Clothing Survey

A similar study was made a few years previous with regard to the clothing situation of our girls. The data gathered showed:

1. Average income of the girls attending school, their expenditures for clothing, and the apportionment of the money earned.
2. Number and kinds of articles of clothing worn by the girls—whether they were ready-made or homemade.
3. Average price paid for each article of clothing.
4. Length of service for the various articles of clothing.
5. Practical suggestions for a usable budget.

The survey also showed that greater emphasis should be placed in the clothing curriculum on the following items:

1. Attention to budget-making; not only for clothing but for the expenditure of the entire income.
2. Training in judging the value of purchases, in making wiser selections, and in developing new appreciations for the common things of life.
3. Need for training in the identification of staple fabrics, their properties, and their value.
4. Practical work on the renovation and care of clothing where "doing" superseded "discussion."

5. Preparation and use of illustrative material for teaching the above effectively.

This study increased the interest in budget-making for both pupils and teachers because they were using live material. It also helped the teachers to gain a broader insight into the problems of the girls.

READING SURVEY

The third survey that was conducted among the girls concerned their reading interests. It resulted in the establishment of a branch library within the school, having books especially suited to students between the ages of fourteen and eighteen years. A gradual increase in reading is shown by the fact that the number of books issued to students has practically doubled in five years.

A special effort is being made this year to develop a definite reading program in every general subject classroom. In considering the work, two questions were paramount:

1. Has the student mastered the mechanics of reading?
2. If she has mastered them, are the interests in reading appropriate?

In order that the student may come in direct contact with good books, small libraries have been established in every classroom. Arrangements also have been made for the students, at certain definite times, to visit the large branch library within the school where they are taught its use. It is believed that this special training will gradually upgrade their reading interests and will exert a decided influence on their reading choices in later life, when contact with the school has ended.

Other Needs and How They Are Met

1. *Classroom organization.*

Another important phase of our work is the training of our young women for better citizenship. This is done through a classroom organization in each class, headed by a president and a secretary. It is hoped that through this type of organization the young people may learn:

(a) How to conduct a business meeting properly.

(b) How to assume responsibility with regard to the following:
  (1) Proper conduct within the classroom and in the corridors.
  (2) Management of certain classroom details.
  (3) Contributions to the assembly program and the like.

It is our aim to develop in the student body a school pride and a school spirit that will reach out from the school and make its influence felt throughout the entire city.

2. *Girls' clubs.*

Attention has been paid to the social development of the girl through another type of organization known as girls' clubs. The aim of club work is to give the girl an opportunity to express herself during her leisure time along a line of work in which she, as well as other girls, is especially interested. The names of some of these clubs indicate the girls' choices: Charm, Dream-Home, Dramatics, Singing, Handicraft, Recreation, Travel, Adventure, and the like.

3. *The business girl and her personal development.*

A special course has been developed for the working girl interested in the commercial field. This course aims to give her such information as will tend toward her greater personal development. Such topics as the following are included: The Business Girl and Her Clothing; Her Personal Appearance; Her Recreation and Development; Her Money; Her Food; Her Health; and Her Duties in the Home.

4. *The visiting teachers and the visiting nurse.*

The visiting teachers of the school aim to meet the needs of those girls between the ages of fourteen and eighteen years who, through some unfortunate circumstance, such as illness or death of the mother, are compelled to remain at home. They give such instruction as the needs within each home seem to indicate.

The visiting nurse also goes to the home and gives instruction in prenatal and infant care to young married or unmarried mothers between the ages of fourteen and eighteen years.

5. *The employment and guidance department.*

This department of the school looks after the working interests of the girls by placing them in industry.

Other special activities are the dental clinic, which administered to 3422 students last year; the school nurse; the department of visual instruction; as well as the department of dramatics, music, art, and corrective physical training.

Each part of the curriculum is the result of a need in the lives of these students. Each need, after it is discovered, is met by a definite provision in the curriculum. In this brief summary an attempt has been made to show the plan used by the Milwaukee Vocational School in arriving at a satisfactory method for giving instruction to this great group of working girls who come under its care.

WHAT ARE THE LIMITATIONS OF OBJECTIVE TESTS? HOW CAN THEY BE EFFECTIVELY SUPPLEMENTED?

REGINA J. FRIANT

Associate Professor of Home Economics, Iowa State College, Ames, Iowa.

1. The ultimate aim of all vocational work is to develop the ability to do. To legitimately measure the results of our teaching in vocational home economics we must find some method by which we will be able to evaluate the ability to do. The exact abilities to be measured will be determined by the objectives of our courses. These objectives in turn will be set up in terms of pupil accomplishment. They may be abilities to make judgments, abilities to reason through problems, abilities to do creative planning or abilities to do manipulative work.

2. Tests and scales in the field of home ecomomics for measuring skill and ability, while useful for experimental purposes, for remedial work and for comparison purposes, are too meagre to serve as a means of evaluating the results of instruction. They measure a single process. Most home economics problems involve many processes.

3. The objective type of test most frequently used in the field of home economics is a test for measuring information. Objective tests for measuring information measure acquisition of information only and do not measure retention of knowledge. If we are to measure retention of knowledge we must measure the factors which make for retention. At Iowa State College we hold to the theory that interest, understanding, fixation and subsequent use govern retention. To support this theory the experimental evidence which we have, shows that the group of three hundred students testing four thousand facts, an average percentage of retention for a period of five years, was 90% when both subsequent use and understanding were present. When only one of these was present the retention was 75%. In studies made at the same institution with a large group of students, a very low and sometimes negative correlation was found between near acquisition and knowledge and retention. The highest correlation found was .43. The average was .26.

4. There are many phases of home economics work that do not lend themselves to the generally accepted type of objective test. These are family relationships, child care and those phases dealing with habits and attitudes which are best measured by changes observed in the pupils.

5. To evaluate home economics work, I believe that evaluation should be made by means of:

(a) problems that are true to life situations,

(b) direct observations of the use of the thing to be evaluated,

(c) evaluation of the actual work of the student.

WHAT MEASURES OF PUPIL DEVELOPMENT IN HOME ECONOMICS ARE RELIABLE AND VALID

EDNA M. ENGLE

Principal Girls Vocational School, Baltimore, Maryland.

Less has been done in measuring pupil development in the home economics field than in any other. This is due largely to the fact that suitable tests have not been developed and that administrators in general do not think it necessary to test this field. In most cities, home economics is required in the junior high school in the 7th and 9th grades and ninety minutes per week is usually given in the school program to each phase of the work.

If this amount of time is given in the curriculum to home economics subjects, then surely, it must be worthwhile to measure the results of teaching. The results of teaching have been, and still are being measured by teachers' judgments which are largely based on the subjective or essay type of examination. Nor only are ratings based on the subjective type of examination but they include such factors as attitudes toward the teacher, *attitudes toward the work*, attitude toward each other, *personal appearance*, *orderliness*, *initiative*, and neatness of notebooks, etc. The writer made a correlation of teachers' work in home economics and the score obtained on an objective type of examination. The correlation was negative which was due to the inclusion of the above named factors. It is true that appearance, neatness, initiative are important factors, but should they be included in rating knowledge of a subject? Do they represent what a girl knows in home economics? This is not only true of the home economics field but other fields as well. In the same study the writer found that home economics teachers use percentage standards of about the same order in assigning marks in their field as academic teachers do in theirs. Teachers ratings are unreliable as shown by Ruch and others. The validity in many cases is questionable. However, teachers marks are still being used by the majority of home economics workers as a basis for passing and failing students. It will be necessary to use a more reliable means of measuring pupil development if we wish to measure pupil progress. This can be done by using objective tests that have been standardized.

For the large majority of home economics workers, it is more worthwhile to recognize a good test by its "ear marks" than to know how to construct tests. Every home economics worker should therefore, be able to apply certain criteria to the selection of an objective test before she uses the test as a measuring stick.

Assuming that an objective type of examination will give a better measure of pupil development than the subjective or essay type of examination, the first thing to consider in selecting an objective test is the validity. Validity is the name given to how well a test measures what it purports to measure. An objective test with perfect validity in any subject would give a perfect measure of that subject. The validity is obtained by correlating the results with other criteria of the same subject. In examining a test for validity one should investigate how the material of the test was assembled and how it was collected. The manual of directions should be examined for these statements, and if none can be found, one has reason to question the care necessary for constructing an objective test. Symonds states that if material has not been carefully collected, one may be sure that the test will be shortlived because of inadequate sampling or because the items do not sample widely among the essentials over which the pupils are expected to have complete mastery.

The second most important criterion for a test is its reliability. It is almost as difficult to construct a reliable test as it is to construct a valid one. Reliability refers to the accuracy with which a test measures what it measures. A test with perfect reliability if given twice to the same group under exactly the same conditions would give exactly the same scores for both tests. No educational test at present has a perfect reliability co-efficient but the better ones are sufficiently reliable to be very useful. One of the causes of unreliability of a test is subjectivity. By this is meant the degree to which the judgment of the scorer enters into the determination of the score. Subjectivity of the test means that it is unreliable, for it is evident that two people scoring the test could obtain different scores or the same scorer might score the same paper differently at different times. If personal judgment is necessary in scoring the test, then the test is subjective and hence unreliable.

What Tests In Home Economics Are Safe To Use At The Present Time As A Means Of Evaluating Home Economics Progress? Only those that have statements of how the test was constructed, the coefficient of correlation for reliability, the criterion used and a statement of how many cases were used in establishing the norms or grade levels. Unless a manual of directions accompanies a test giving these data there is no reason to think that one test is any better than another. Up to the present time, only a few of the available home economics tests have been evaluated and of these few the reliability of the tests was not available, and the probable error of measurement could not be found in a single test on the market. There is a wide field for experimentation and construction of reliable and valid tests in home economics.

How May Valid And Reliable Home Economic Tests Be Constructed? The writer has constructed tests in home economics for the City of Baltimore based on the Baltimore Home Economics Course of Study. These tests cover three phases of home economics, namely: Foods and Cookery, Clothing and Textiles, and Home Management. They cover fifth to tenth grades inclusive. Validity was determined by selecting reputable and up-to-date textbooks. Items were included in the tests which were common to these books. At least a dozen books in each phase of home economics were used. Items were further selected on the basis of twenty-five best courses of study which were taken from a list of one hundred. Courses of study from the following cities were examined: Baltimore, Denver, Lansing, Boston, Detroit, Spokane, Los Angeles, South Bend, Cleveland and Indianapolis. Validity was further determined by collecting final examinations used by teachers and from these were selected a number of items. The test items were submitted to city supervisors, heads of departments in colleges, and recognized leaders in home economics education.

Teachers marks in home economics were found to be unsatisfactory as criteria. The correlations between the objective tests and marks were negative. After a period of training, a selected group of teachers made objective tests based upon what they expected a girl to know in home economics. The tests constructed were exactly the same type as those used by the writer and contained the same number of items. There was definite correlation between what the teachers expected the girls to know and what the supervisor expected of them. Although the correlations were not high in all grades, it was more proof of a valid test. The reliability of the tests was determined by giving the same test twice to the same girls under exactly the same conditions with an interval of ten minutes between the tests.

There are two forms of the tests, form A and form B. The probable error of the scores has been determined for each grade. Grade and age equivalents have been determined for each subtest based on the averages obtained from two city-wide surveys of the home economics students in the public schools of Baltimore as of September 1929 and February 1930. About 15,000 scores

were used for Foods and Cookery, Clothing and Textiles, and about 10,000 in Home Management.

How Can The Results Of Such A Testing Program Be Used? In Baltimore an analysis chart has been devised which tells at a glance what children are above and below the average (grade level) and what children are just at grade. The names are placed on the chart so that the teacher can immediately see what children require attention. From this information the teacher makes case studies of those who are below grade and has some basis for remedial work. The results are used in comparing the progress of classes within the school and comparison of school with school. Progress from year to year and term to term is also determined.

In home economics where the classes are large, attention is apt to be placed on the class, but with the use of the analysis chart used in Baltimore, the attention of the teacher is shifted from the class to the individual. A more diagnostic attitude is taken toward the pupil and emphasis is shifted from subject matter to the child. Better grouping within the group according to abilities is possible with this program. It results in better teaching and better supervision. The supervisor is able to find her high and low supervisory points without waste of time. The use of these tests enables a wider sampling of subject matter than the essay type and hence is a more reliable measure. The results of the tests were used in revising the Baltimore Course of Study. It was particularly useful in grade placement of subject matter and elimination of subject matter that the children already knew. We found that the children have a fund of knowledge about home economics which they have acquired at home and in school before they began their work in home economics. The testing program has helped in producing a better course of study. A careful study of the results of testing in Baltimore has led to better policies regarding improvement of classroom instruction. The results cannot be taken at face value. They must be carefully studied and good common sense must be applied in interpreting the results.

The writer feels that one of the best ways of getting reliable and valid tests is to get your Bureau of Research, if you have one, interested in your field. Home economics tests are a part of the regular testing program in Baltimore. The statistical work is done in the Bureau of Research. The testing program has done much in raising and establishing a high standard for home economics in Baltimore.

What Do Objective Tests Measure In Home Economics And What Do They Fail To Measure? Home economics objective tests measure factual knowledge of the subject, knowledge necessary to obtain skill, knowledge for good habit formation and right living, etc. They fail to measure attitudes, moral value, skill, initiative, responsibility, etc., but the same is true of objective tests in all other fields. Performance or material tests in home economics are expensive in time and material and none have been worked out on a scientific basis.

What Measures Of Pupil Development Are Reliable And Valid? The only tests that are reliable and valid are those that are worked out on a scientific basis. Such tests should include in the manual of directions reliability coefficients, probable error of measurement, method of collecting and assembling material and criterion used. The tests should not require any particular skill for scoring and should be easy to administer. The tests should have duplicate forms or state reliability of halves of the test so that the reliability can be worked out. There should be norms or standards for interpreting the results. It is necessary that home economics leaders become familiar with the technique necessary for judging tests and for constructing them.

No claim is made that objective tests will solve the whole problem of measuring home economics but that a very small but definite contribution has been made to the improvement of classroom procedure and instruction. The field is new in home economics and offers splendid opportunities for those interested in this type of research.

HOME ECONOMICS IN WISCONSIN

Under George-Reed Act
1929-30

Wisconsin now has fifteen rural high school departments, and expects to have at least eight more in 1931-32. The increase in enrollment in these classes over the previous year was 324. Five of these rural departments also fostered part-time classes for rural girls between the ages of 14 and 18 years of age, and evening classes for rural home makers.

The teachers in the rural high schools who were hired on a 12 month's basis supervised the following types of projects: health, exterior and grounds, foods, clothing, interior decoration and house furnishing, laundry, care and repair of clothing, housework, care of children, budgeting, and baking.

The evening classes have been very well liked. The following short item is an example of this work in a rural community that began the George-Reed Program in September, 1930:

"Miss Verna Crocker, teacher of home economics at Prairie du Sac, writes that she made several calls this fall on women in the rural communities surrounding Prairie du Sac for the purpose of arousing interest in adult home making classes. As a result of these trips, ninety women enrolled for courses in Foods and Interior Decoration.

"An interesting project undertaken during the latter part of the course in Interior Decoration was to go to two homes to rearrange furniture.

"One group went to a home in town, the other group went to a home in the country. These visits proved to be very interesting and profitable as many of the women in the class have since that time expressed a desire to rearrange the furniture in their own homes."

Under Smith-Hughes Act

Nine different rural communities in the vicinity of Stoughton have had afternoon classes in home economics. Mrs. Sarah Leslie of the Stoughton Part-time School (Smith-Hughes) has been itinerant home making teacher for the past two years. She has met groups of women in the farm homes, totaling 301 in the year 1929-30. The cost for these rural classes has been defrayed by the Stoughton Board of Vocational Education. There are several cities in the state that are serving the surrounding communities in this way.

The City Vocational Part-time Schools have had 6121 women in adult home making classes during the past year and practically all of the work has been organized on a progressive short unit basis. A strong effort has been made in several centers to promote courses in family relationship, home management and parental education.

Racine, which has a full-time supervisor of adult home making education, has organized "The Home Makers' Club". Four branches of this club meet in their own neighborhoods monthly and have planned several worth while projects throughout the year. A home makers' home talent play in which representatives of the different branches will take part at their annual "get-together" in June. These club members all belong to evening home making classes. A group of Armenian women who attend evening home making classes have also been enrolled in a class where they are learning to read from "Mother's First Book". This helps them to understand their home making lessons better.

The home economics teachers who have been trying out the related science and art units that they prepared two years ago have sent in their commendations, criticisms and suggestions for revising these units. Conferences will be called to consider these suggestions.

INDUSTRIAL EDUCATION

We Will Pay a Dollar for a Question

THE QUESTION BOX

PROBLEM 3

Problem 3—In Continuation School I receive a pupil from another class. How can I determine the kind of work which will be suited best to him?

RUDOLPH ILLIG, JR.
Rochester, N. Y.

Address the News Bulletin Editor, Room 225, State House, Indianapolis, Indiana.

$5.00 will be paid for the best answer received by October 10.

We Will Pay $5.00 for an Answer

PROBLEM 2.

No matter what form of job sheet or instruction sheet I use in my class, how can I get the students to read and use it? The boys read them and toss them aside and do the work according to their own ideas.

ANSWER

Before attempting to answer the question an effort should be made to find out why the students fail to use the job or instruction sheets.

My experience points to mental laziness as the underlying cause of difficulty in the use of job or instruction sheets. It may be only a contributing cause but it is generally there. Frequently the boy has found that if he muddles along in his own way the instructor will shortly come and show him how to do the job. For many, this is less wearing on the gray matter than would be a real effort to do the work from the instructions on the job sheet.

Another difficulty is poorly gotten up or poorly printed job sheets. If the sheet is carelessly gotten up, incomplete, poorly arranged, difficult to understand or hard to read, the boy can hardly be blamed for throwing it aside and going his own way.

Again, the boys may not be able to read understandingly. This is frequently true of boys of high school age when confronted with printed matter of a technical nature. They boys may not be able to read and understand mechanical drawings. Methods of dimensioning may cause them trouble, and fractions or decimals may bring out unsuspected weakness in arthimetic.

As to the remedy for the situation. First, see that the sheets used are readable, both as to subject matter and mechanical getup.

Next, see that they are understood. Spend some time with the class in reading and interpreting job sheets. Accustom them to the idea of getting ideas and information from print.

And last, everlastingly insist that the sheet be used and followed. Do not answer questions that are answered on the job sheet. When such questions are brought up refer the student back to the sheet, and if necessary help him find and get the information from the sheet. Have the student read aloud the parts he does not understand, since the trouble will frequently be careless reading.

All this may be more trouble than to give directly the information requested, but it should result eventually in a willingness and ability to obtain information and to work from job sheets.

LEE M. KLINEFELTER,
1800 La Salle Ave.
Norfolk, Va.

June 9, 1921.

News Bulletin Editor,
Room 225, State House,
Indianapolis, Ind.
Dear Sir·

Having faced the same problem which now holds the attention (and worry) of Arthur Modler, I set about to counteract the boyish impluses which prompt students to work first and avoid reading if possible.

All my job sheets are so written that the questions which end them refer directly, and in logical order, to the contents in the sheets. There is an unbreakable law in my shop that no pupil can begin any job until he has first read and answered *all* the questions pertaining to the job. The questions are so worded that the student must read every part of the job sheet *before* he obtains materials and tools to do the job. Since the work in my shop is entirely individual (each student progressing as rapidly as he can) cheating is almost entirely eliminated. No boy will take time from his own job to answer another's questions. The answers of each job sheet are zealously corrected and poor work or hurried answers are detected and properly rewritten. In this manner, the pupils read the job sheets and thus they are trained to follow instructions. The thing that makes them read the job sheet is the required answers *before* the job is done.

WILLIAM SUNNERS
Jamaica Continuation School
170th St., Jamaica Ave.,
Jamaica, N. Y.

INDUSTRIAL EDUCATION FRATERNITY

In July, 1925, a group of industrial education students and members of the industrial education faculty of The Pennsylvania State College, conceived the idea of organizing an industrial fraternity for industrial teachers who were taking work at that institution during the summer sessions. A fraternity under the name of Iota Lambda Sigma affected an organization, drew up a constitution and by-laws, and developed a ritual. At the close of the summer session, the new fraternity had initiated eighteen (18) members and conferred one honorary membership, the recipient being Doctor Arthur Dean of New York City, well known in the industrial field both as an author and teacher.

At the beginning of the summer session of 1926, the ritual was rewritten and perfected with the professional assistance of Doctor Dean. During this session thirty-two (32) members were

initiated and two honorary degrees were conferred, the honors this year going to Dr. Frank Leavitt of Pittsburgh and Dr. Lewis Hawkins of New York City.

During the 1927 summer session, forty (40) new members were initiated into Iota Lambda Sigma. Honorary memberships this year were bestowed upon Mr. Frank K. Phillips, Manager of the Educational Department, American Type Founders Company, Jersey City, N. J., and Mr. L. H. Dennis, Deputy Superintendent of Public Instruction, Harrisburg, Pa.

The fraternity has grown during the summer sessions of 1928, 1929, and 1930 until the Alpha Chapter has a membership of 221. During 1928 Mr. Frank Cushman of the Federal Board for Vocational Education, Washington, D. C., and Dr. Robert O. Small, Director of Vocational Education, State of Massachusetts, were made honorary members; in 1929 Mr. G. A. McGarvey of the Federal Board, Dr. G. D. Whitney, Director of Vocational Education, University of Pittsburgh, were taken in as honorary members.

GUIDANCE AND VOCATIONAL TRAINING OF CHILDREN

Continued from Page 28

when called upon. *Fifth*, and most important of all— a correct evaluation and interpretation of the data secured from the various sources and procedures.

In the evaluation and interpretation of data, the counselor has a grave responsibility, for the whole trend of the individual child's life may rest upon the conclusions reached.

If these are the essentials of guidance, what should be the organization for providing it? I stated before that it is my opinion that guidance should be a continuous process from handicap to adjustment. Shall we leave it to the home to give the social guidance, the teacher to give educational guidance, and the principal of the vocational school or class to give the vocational guidance? Decidely not. There should be a special agency that will be responsible for the handicapped children —to give him the various kinds of guidance he needs; to bring the child and the specific services he needs together; to follow-up and through the recommendations and conclusions arrived at through counsel and advisement with the home, the hospital, the school, and the place of employment. The agency responsible for this should provide the *continuous* guidance service.

Dr. David Snedden has said that knowledge is not education until it goes to work. With respect to vocational training, I should like you to conceive it as vocational guidance at work.

Vocational training divides itself into two distinct phases—viz; Prevocational training and specific vocational training. It is during the period of prevocational training that vocational guidance goes to work. While prevocational training may be regarded by some strictly as an exploratory procedure to give the youngster an opportunity to try out a wide range of occupations before deciding upon his ultimate employment objective, it has a far more important function. It is during this period that the elements of employability which I have mentioned before begin to show the degree of their development, and the handicapped child begins to put into practice his physical, mental, educational, and temperamental abilities. He begins to see the practical application of reading, writing, arithmetic, and character instruction that he has received in the class room. In other words, prevocational training integrates, crystallizes, and conditions the personality traits desirable in an actual work situation.

Aside from its value as an integrating process, pre-vocational training has several other important values. Few people know or realize the importance of muscular coordination as a factor in employability of the individual. By muscular coordination is meant the skill, speed, and dexterity with which the mind and muscles work together in activities requiring mental and physical cooperation.

It is one of the functions of prevocational training to provide a type of practice in processes that will develop muscular coordination. This is especially important for the handicapped child for the reason that in many instances the normal degree of coordination has been impaired by the disability.

For the handicapped child, pre-vocational training has this special significance. It is a very valuable therapeutic agent—both physical and mental. From the physical standpoint it provides exercise for the disabled part—stretching, strengthening, and making stiff muscles or joints responsive. From the mental side it gives a certain amount of satisfaction at having accomplished something. It is in fact good occupational therapy. Furthermore, if a high standard of accuracy and neatness is maintained the youngster acquires these habits and they will carry over to his specific training.

Last, but not least, pre-vocational training is an aid to the child and the guidance counselor in the selection of the employment objective. If the types of training are intelligently selected and given, both physical and mental skills are developed. It is so important to our handicapped children that special attention and study should be given by those responsible for their education and training. I believe in pre-vocational training for handicapped children so strongly that I want to summarize what I've said about it in order to impress its value upon you.

First—Pre-vocational training develops muscular coordination which is an important factor in employability.

Second—It is valuable as a therapeutic agent—acting upon both the physical and mental phases of the child's development.

Third—It is of great value in the selection of the employment objective for specific vocational training.

Fourth—It makes application of the facts, knowledge and training given in the academic classes.

I subscribe whole-heartedly to the principle set up by our educators, viz: "The education of the whole child." But I believe that the education of the whole child should be built around the aptitudes and abilities of the child. I believe sincerely that through prevocational training we can best be able to discover the aptitudes and abilities of the child—for it is in the practical situations set up in this kind of training that the child discovers his interests and shows his capacities. Our special schools and special classes should be so organized as to provide a maximum of efficiency in the prevocational training of the handicapped children.

With respect to what I have termed specific vocational training, to distinguish it from pre-vocational training, I want to give you my definition of it and point out the characteristics that differentiate it from other kinds of education or training.

The United States Census lists some 20,000 jobs at which people earn their living in this country. These jobs vary in the difficulty of performance much as do the tasks set for the various grades in school work, beginning with those requiring little skill or preparation and ascending to those requiring the highest type of skill and long periods of preparation. They differ in their physical, mental, and temperamental requirements. Each of these jobs requires a period of training in order that the new worker may acquire skill, speed, and technical knowledge incident to the performance of its various operations. That period of training is vocational training as we are concerned with it here today. It is the giving of instruction, practice, and technical knowledge in the operations involved in the performance of a specific job, in order that the learner may acquire the skill, speed, and technical knowledge required in the performance of the job under production conditions.

That definition is sound for any job whether it be sorting bolts, repairing an automobile, writing, teaching, or navigating an airship. It is specific training for a specific job.

Now what are the characteristics of vocational training? Well, first, it may or may not be organized. That is to say, it may not follow the logical learning steps beginning with the less difficult steps and proceeding to the more difficult. Naturally, where training is given in an institution of learning it will be organized, but in commercial and industrial establishments, where a majority of these children will of necessity have to be trained, instruction will be unorganized for the simple reason that the flow of jobs into the plan cannot be regulated.

The second characteristic is—vocational training is directed toward a specific employment objective. While pre-vocational training may give opportunity for instruction and practice in a number of different occupations, vocational training must lead directly to a specific kind of employment.

Its third characteristic is—that in general it is individual, not class, training. The reason is obvious. With 20,000 possible occupations at which people earn their living it would be impossible for any school system to provide classes for them. Of course, a large number can and will get their training in the public institutions, vocational schools, colleges, and universities, most of which will be organized class instruction, but for a far larger number, vocational training will be given on an individual basis in the commercial and industrial plants where they will work after being trained on their specific jobs.

The fourth characteristic is—it simulates or is given under actual working conditions. That is to say, the instruction and practice should be made as nearly the same as actual production operation as is possible.

Fifth, it is distinct from general education. It follows rather than running concurrently with general education. I am firmly convinced that objectives should not be confused, and any attempt to carry on general education and vocational training at the same time results in a divided interest that is not conducive to good results from either an educational or vocational standpoint. To be sure, pre-vocational training should run concurrently with general education because it is a factor in both educational and vocational training, all the energy, interest, and capabilities of the youngster should be devoted strictly to that training.

If then vocational training has these characteristics, i. e., may or may not be organized; is directed toward a specific job objective; is, in the main individual training; it simulates actual working conditions; and is distinct from general education, what should be the organization of the machinery for providing it?

Quite logically, one thinks immediately of the public schools. While they are at present wholly inadequate even in their provision for pre-vocational training—at least a beginning has been made in providing certain types of vocational training. It is necessary to expand this beginning to include a wider range of occupations. The important thing for the school system at present is to make it possible for the child to get the training outside the school system if it is not available within it. This means that counselors and supervisors of vocational training for handicapped children should be provided by the school system—their duties being to see that the required training is secured—wherever it may be found. Such a service should either be under the direct supervision of the state rehabilitation service or very closely coordinated with it. If at all possible, duplication of effort should be avoided. There is too much work needing to be done to warrant any conflict of jurisdiction.

Legally, a handicapped child becomes the responsibility of the state rehabilitation service when he has reached the work age if he requires specific vocational training to prepare him for a job. That department is not only responsible for assisting in the selection of the employment objective—he is responsible for finding a place to give the training and for paying the costs involved. A number of the State rehabilitation services are setting up cooperative arrangements with public school systems by which the school system employes full-time supervisors for the handicapped within their respective jurisdiction . If these supervisors can secure the required training within the school system, it is secured there and the cost absorbed by the school system. If, however, it is necessary to secure the training from private schools or commercial or industrial establishments, they are placed in training and supervised by the school system, but the cost is paid by the state rehabilitation service.

THE ITINERANT TEACHER
A WISCONSIN PLAN FOR TRADE INSTRUCTION WORK

BY
GEORGE P. HAMBRECHT
Director, State Board of Vocational Education, Madison, Wisconsin.

An itinerant instructor is one who is jointly employed by several neighboring cities and who divides his time among them, usually spending one day

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Statement of Ownership, Management, Circulation, Etc., Required by the Act of Congress of Aug. 24, 1912

Of AMERICAN VOCATIONAL ASSOCIATION "NEWS BULLETIN" published quarterly at Indianapolis, Indiana for April 11, 1931.

STATE OF INDIANA } ss.
COUNTY OF MARION }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Z. M. Smith, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the American Vocational Association "News Bulletin" and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411 Postal Laws and Regulations, printed on the reverse of this form, to wit:

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(*Signed*) Z. M. Smith, Secy.

Sworn to and subscribed before me this 8th day of April, 1931.
(SEAL) (*Signed*) Louise Givan
(My commission expires January 31, 1935.

Form 3526—Ed. 1924.

STANDARDS OF ATTAINMENT IN INDUSTRIAL ARTS TEACHING

A COOPERATIVE ANALYSIS OF TRADE AND INDUSTRIAL ARTS SUBJECTS

Summary of the Plan

R. W. Selvidge

University of Missouri, Columbia, Missouri.

The complete plan for a cooperative analysis was set forth in detail in the May number of this Magazine; see page 8. This summary is offered for the benefit of those who did not have an opportunity to read the complete statement.

In order to coordinate the efforts of a great number of teachers who are engaged in attempts to analyze the various industrial-arts subjects and the skilled trades for the learning units involved, the following plan is proposed.

1. That every teacher who is interested in such an analysis join in this undertaking.
2. That we analyze all industrial-arts subjects, as taught in the high school, for the learning units involved.
3. That we analyze the principle skilled trades for the learning units involved.
4. That tentative analyses of the selected subjects, or trades, be published and distributed as rapidly as may seem practicable.
5. That any shop teacher or supervisor who is willing to cooperate, or to offer suggestions in the way of modifying, adding to, or taking from the original list, should send such suggestions or comments to R. W. Selvidge, University of Missouri, Columbia, Mo.
6. That the suggestions thus received be carefully studied, edited, and incorporated so far as possible into the original lists; and that the revised lists be published, together with the names of those who cooperate.
7. That those who are interested send in the analysis of any subject, or trade, which they have prepared, which may be used by the Committee as the basis of the preliminary analysis. This form of cooperation will be of great value in getting more satisfactory preliminary lists of units.

Since woodworking is one of the most common industrial-arts subjects, and since more teachers are familiar with it than with any other subject, I submit this analysis as first of the series. The following learning units are, or may be, taught in high-school courses in woodworking. The list does not cover the learning units involved in carpentry as a trade, nor is it confined wholly to structural problems or to the manipulative processes involved in the use of woodworking tools. Some learning units dealing with wood-finishing are included in this list because some wood-finishing is usually taught in connection with high-school courses in woodworking, and are regarded as an essential part of such a course. Learning units involving other materials, such as sheet-metal and electric work, should be included in a woodworking course, but such of these as seem desirable may be selected from the other lists of learning units without giving regularly organized courses in those subjects.

Our woodworking courses have in the past been too narrow, and the experiences provided have not given contact with a sufficient number of materials. There is no more reason for excluding other materials from a course in woodworking than there is for excluding all reference to history from a course in literature. As a matter of fact, we have lost much in value and practical usefulness of both academic and industrial-arts subjects by our "logical" and exclusive divisions of subject-matter.

The list of learning units is divided into three principal groups· "The Things You Should be Able To Do," "The Things You Should Know," and "The Things You Should Be." The first group involves *manipulative skill, knowledge of procedure, and construction processes*. The second group involves *information concerning qualities and characteristics of materials*, and other matters of general interest in the field. The third group involves *attitude and habits* which affect the success of individuals. They probably are the same for all subjects.

The Learning or Teaching Units

A. The Things You Should Be Able To Do:

1. To read a working-drawing.
2. To make out a bill of material.
3. To plan the procedure in doing your jobs.
4. To check material when received.
5. To use a rule in measuring and dividing spaces.
6. To lay out pattern on stock.
7. To check the layout.
8. To use dividers, or compass, for laying out curves and dividing spaces.
9. To gage with a pencil.
10. To gage with a marking-gage.
11. To use a try-square for testing.
12. To use a try-square for laying out square cuts.
13. To adjust a jack-plane or a smooth-plane.
14. To adjust a block-plane.
15. To plane a surface true.
16. To plane an edge square with an adjoining surface.
17. To plane end-grain.
18. To square up a board.
19. To saw to a line with a cross-cut or rip-saw.
20. To use a back-saw.
21. To use a coping-saw for inside or outside curves.
22. To use a compass-saw.
23. To use a turning-saw.
24. To round edges.
25. To finish outside curves.
26. To finish inside curves.
27. To drill holes with an auger-bit.
28. To countersink holes.
29. To bore holes with an auger-bit.
30. To fasten with screws.
31. To use brad-awl for making holes for screws or nails.
32. To trim or pare with a chisel.
33. To use a gouge for gouge work.
34. To use a scraper.
35. To use sandpaper properly.
36. To use a wood rasp for shaping ends, edges, or curves.
37. To drive and draw nails.
38. To set a nail or brad.
39. To use a T-bevel.
40. To use a spokeshave.
41. To lay out an octagon.
42. To lay out a hexagon.
43. To lay out an elipse.
44. To lay out and cut a chamfer.
45. To prepare glue.
46. To glue up work.
47. To use handscrews and clamps.
48. To put on locks.
49. To put on drawer-pulls.
50. To fit hinges.
51. To put on ball-catches.
52. To apply stain.
53. To clean and care for stain-brushes.
54. To apply stain for two-tone effect.
55. To apply fillers.
56. To apply shellac.
57. To clean and care for shellac-brushes.
58. To apply wax.
59. To apply varnish.
60. To clean and care for varnish-brushes.
61. To apply enamel.
62. To clean and care for enamel-brushes.
63. To apply lacquer.
64. To clean and care for lacquer-brushes.
65. To use a spray-gun.
66. To give a fumed-oak finish.
67. To apply paint.
68. To clean and care for paint-brushes.
69. To transfer a design.
70. To apply inlay.
71. To lay out irregular design by means of squares.
72. To lay out duplicate parts.
73. To make a butt joint.
74. To make a notch joint.
75. To make a half-lap joint.
76. To lay out and cut a dado joint.
77. To cut a groove or a rabbet.
78. To lay out and cut a cross-lap joint.
79. To lay out and cut a miter joint.
80. To make a dowel joint.

81. To lay out and cut a blind mortise-and-tenon joint.
82. To lay out and cut a thru mortise-and-tenon joint.
83. To lay out and cut a haunched mortise-and-tenon joint.
84. To construct a panel.
85. To make a splined joint.
86. To lay out and cut a housed joint.
87. To make an edge-to-edge glue joint.
88. To lay out and cut tapers.
89. To make a drawer-slide.
90. To make and fit a drawer.
91. To fasten on a table-top.
92. To fasten with lag-screws or bolts.
92. To cut an edge mold.
94. To do simple upholstering.
95. To sharpen edge tools, such as a knife, chisel, and plane.
96. To sharpen a screwdriver.
97. To sharpen a scraper.
98. To sharpen auger-bits.
99. To sharpen a saw.
100. To keep tools free from rust.

Only learning units involving hand processes have been listed above, but many schools teach the use of woodworking machinery. The learning units for machine woodwork are based upon the individual machines.

The Jointer.
1. Safety rules for operating jointer.
2. Range of work which may be done on jointer.
3. How to care for and adjust the machine.
4. How to joint an edge.
5. How to cut a chamfer or bevel.
6. How to make a spring joint.
7. How to surface narrow stock.
8. How to take the wind out of a board.
9. How to cut a rabbet.
10. How to cut tapers.

The Circular Saw.
1. Safety rules for operating saw.
2. Range of work which may be done on the saw.
3. How to care for and adjust the saw.
4. How to rip.
5. How to cut off.
6. How to cut grooves.
7. How to cut dadoes.
8. How to cut tenons.
9. How to cut miters.
10. How to cut tapers.
11. How to resaw.

The Band Saw.
1. Safety rules for operating the band-saw.
2. Range of work which may be done on the saw.
3. How to care for and adjust the saw.
4. How to saw curves.
5. How to rip.
6. How to cut off.
7. How to cut tenons.

The Surfacer.
1. Safety rules for operating surfacer.
2. Range of work which may be done on a surfacer.
3. How to care for and adjust the surfacer.
4. How to adjust for depth of cut.
5. How to adjust and control feed.
6. How to feed work into machine.

The Sander.
1. Safety rules for operating sander.
2. Range of work which may be done on the sander.
3. How to care for and adjust the sander.
4. How to operate sander on flat work.
5. How to operate sander for curved work.

The Mortiser.
1. Safety rules for operating mortiser.
2. Range of work which may be done on mortiser.
3. How to adjust and care for mortiser.
4. How to set and adjust chisels and bits.
5. How to feed work.
6. How to make set-up for duplicate parts.

The Turning-Lathe.
1. Safety rules for operating lathe.
2. Range of work which may be done on the lathe.
3. How to adjust and care for the lathe.
4. How to center stock.
5. How to mount work between centers.
6. How to rough down with a gouge.
7. How to smooth with a skew.
8. How to lay off pattern on piece.
9. How to size with a sizing-tool.
10. How to mark off with skew.
11. How to use a cut-off tool.
12. How to cut shoulders with a skew.
13. How to cut tapers with a skew.
14. How to cut beads or convex surfaces with a skew.
15. How to scrape with a skew.
16. How to scrape with diamond-point and scraping tool.
17. How to measure with outside calipers.
18. How to measure with inside calipers.
19. How to cut concave curves with gouge.
20. How to make and use templets.
21. How to mount work on a face-plate.
22. How to mount work on a screw-chuck.
23. How to size work on a face-plate.
24. How to hollow out work on the face-plate or screw-chuck.
25. How to fasten pieces together temporarily for turning.
26. How to cut off stock in the lathe.
27. How to sandpaper in the lathe.
28. How to apply finish in the lathe.
29. How to make a hollow chuck and mount work in it.
30. How to make a spindle chuck and mount work on it.
31. How to make a set-up for duplicate parts.

B. The Things You Should Know:

I. *Concerning Lumber.*
1. You should be able to identify the following kinds of lumber and any other kinds in common use in the community: The pines, spruce, cypress, oak, walnut, birch, maple, mahogany, red cedar, hickory, gum, chestnut, poplar.
2. You should know the principal characteristics, the working qualities, the principal uses, and the sources of supply of each.
3. You should know the method of cutting and milling lumber.
4. You should know how lumber is dried.
5. You should know the effect of moisture on wood.
6. You should know the standard dimensions of lumber and how classified.
7. You should know the nominal and the actual dimensions of lumber.
8. You should know how veneer and plywood are made, and their uses.

II. *Concerning Finishes.*
1. The object of finishes.
2. The kind of finishes in common use; such as stain, oil, wax, shellac, varnish, lacquer, enamel, paint.
3. Durability of different finishes.
4. The conditions or places in which various kinds of finishes may be used to advantage.
5. Materials from which finishes are made.

III. *Concerning Glue.*
1. The kinds of glue.
2. The preparation of glue.
3. The conditions and requirements in use.

IV. *Concerning nails, brads, and fasteners.*
1. The kinds of nails.
2. The uses of the different kinds.
3. The sizes of nails.
4. How nails are sold.
5. How nails are manufactured.
6. Sizes of brads and how sold.
7. Size, kinds, and uses of corrugated fasteners.
8. Sizes and uses of clamp-nails.

V. *Concerning screws.*
1. The kind of screws.
2. The uses of the different kinds.
3. How the sizes and kinds of screws are indicated.
4. How they are sold.

VI. *Concerning sandpaper and steel-wool.*
1. The kinds of sandpaper.
2. Grades of sandpaper.
3. Principal uses.
4. Grades and uses of steel-wool.

VII. *Concerning styles of furniture.*
1. The distinguishing characteristics of different types of period furniture.

VIII. *Concerning the design of furniture.* In the design of furniture you should develop a fair judgment with respect to the following:
1. Is it adapted to the use for which it is intended.
2. Is it structurally good?
3. Is it well made?
4. Are the structural members in good proportion?
5. Does it have an appearance of stability?
6. Is the structure as a whole well proportioned?
7. Are the outlines pleasing?
8. Is it well finished with an appropriate finish?

IX. *Concerning manufacture of wood products.*
1. The location of important manufacturing concerns.
2. The divisions of labor in the industry.
3. The use of automatic machinery.

X. *Concerning joints.*
1. Types of joints, where used, and why.

XI. *Concerning hardware.*
1. Types of latches and where used.
2. Types of hinges and their uses.
3. Types of locks and where used.
4. Types of nails and where used.
5. Special types of fittings.

XII. *Types of tools and their uses.*
Saws, planes, knives, chisels, hammers, boring-tools, files.

XIII. *Kinds of grinding and sharpening stones, their grades and uses.*

XIV. *Opportunities and requirements in carpentry and woodworking trades.*

C. What You Should Be:

The items in this list are common to all industrial subjects and will not be listed in subsequent analyses as it would be a mere repetition.

The following is a list of desirable attitudes and habits which will contribute to your success in life. Only *you* can develop them, and you should consciously practice them until they become fixed habits.

I. *Industry.* This means a habit of careful, thoughtful work, without loitering or wasting time.

II. *Cooperation.* This means an attitude of readiness to assist others when they need help, and to join in group undertakings.

III. *Consideration of others.* This means a thoughtful attitude in the matter of making things easy and pleasant for others, such as keeping things in order, putting tools away in good condition, and always doing your full share of work where others are involved.

IV. *Self-reliance.* This attitude is a very important factor in success. It means that you should develop the habit of planning your tasks carefully and thoughtfully, and carrying them out with the least possible assistance. Be sure the problem is too difficult for you before you call for help.

V. *Readiness to assume responsibility.* This means that you should not refuse

to undertake a task because it is difficult, and when once undertaken you should carry it thru to completion.

Conclusion:

One of the principal difficulties in making up these lists is the tendency, in nearly every instance, to make the units too large and too indefinite, or to make a unit include things which ordinarily would not come together in instruction.

It is well to emphasize that these learning units are not to be taught as separate and unrelated things. Certain units, like "How to sharpen a saw" or "How to sharpen a plane", do not belong to any particular job, and may well be taught as individual learning units. In general, however, interesting and worth-while jobs involving these units should be used as a means of teaching.

Let us have your suggestions and help in this cooperative plan.

II. Analysis of Sheet-Metalwork for High Schools.

There is no very good reason why sheet-metalwork in the high school should be confined to the use of tin and galvanized iron. Altho these metals are cheap, and waste products often may be used to teach some of the fundamental learning units, the teacher who confines his work to these materials loses an opportunity to arouse interest in the esthetic elements of design and the finer things in craftsmanship.

Five cents will purchase enough copper to make a small, well-designed, well-finished tray, or some other article of pleasing and attractive appearance, which will have a permanent place in the home and be a priceless treasure to mother or sister. Copper is our most friendly metal, and boys should have an opportunity to get acquainted with its qualities and characteristics. For this reason learning units dealing with other metals than tin and galvanized iron are included.

This analysis is for what is usually covered in a high-school course, and is not intended to cover the trade of sheet-metalwork.

The list of learning units is divided into three principal groups: "The Things You Should Be Able To Do," "The Things You Should Know," and "The Things You Should Be." The first involves *manipulative skill, knowledge of procedure, and construction processes.* The second group involves *information concerning qualities and characteristics of materials* and other matters of general interest in the field. The third group involves *attitudes and habits* which *affect the success of the individuals.*

The Learning or Teaching Units.

A. The Things You Should Be Able To Do:

1. To make out a bill of material.
2. To check material when received.
3. To plan your procedure in doing your job.
4. To transfer patterns to sheet-metal.
5. To use tinners' snips in cutting metal.
6. To solder tin, copper, brass, and galvanized iron.
7. To solder aluminum.
8. To sweat a joint.
9. To light and operate a blow-torch or gas-furnace.
10. To use the squaring-shears.
11. To form by hand.
12. To use a bar-folder.
13. To turn edges for a hem.
14. To fold a curved edge.
15. To rivet joints.
16. To countersink by hand.
17. To punch holes with solid punch.
18. To punch holes with hollow punch.
19. To raise or bump sheet-metal forms.
20. To roll a sheet on forming-machine.
21. To wire edges on wiring-machine.
22. To use the circular shears.
23. To wire edges with bar-folder and hammer.
24. To turn a lock seam.
25. To groove with hand-groover.
26. To groove with grooving-machine.
27. To use a burring-machine.
28. To make a setting-down seam by hand.
29. To make a setting-down seam on a machine
30. To make a double seam on stake or machine.
31. To double seam at bottom.
32. To double seam corners.
33. To crimp or shrink edges.
34. To use cornice-brake.
35. To use the taper-edger.
36. To use the tube-formers.
37. To use the square stake in forming.
38. To use the hatchet stake in forming.
39. To drill holes in metal.
40. To use a cold-chisel.
41. To stretch metal with hammer for flange or joint.
42. To use a hand-swage.
43. To use a beading-machine.
44. To braze with hard solder.
45. To lay out and form hinges.
46. To prepare cut acid flux.
47. To anneal copper or brass.
48. To give hammer finish to copper or brass.
49. To apply lacquer finish.
50. To color copper or brass.
51. To etch on copper or brass.
52. To clean copper with acid.
53. To tin soldering-copper.
54. To use a cold-chisel.
55. To use a hack-saw.
56. To use the file.
57. To use taps and dies.
58. To bend, twist, and form wire.
59. To bend, twist and form strap-iron.
60. To develop patterns for right cylindrical objects.
61. To develop patterns for objects rectangular in section.
62. To develop patterns for elbows.
63. To develop patterns for conical objects.
64. To develop patterns for oblique conical objects.
65. To develop pattern for spout.
66. To develop pattern for lip.
67. To develop pattern for T.
68. To layout pattern for mitered corner.
69. To lay out pattern for solid corner.

B. The Things You Should Know:

1. The kinds of solder and their uses.
2. The kinds of fluxes and dipping solutions and their uses.
3. The names of tools, equipment, and operations in sheet-metal shop.
4. How to care for tools and equipment.
5. Be able to identify the various kinds of sheet-metal.
6. The gages of sheet-metal.
7. Standard sizes of soft iron wire.
8. Source and characteristic of tin.
9. Methods of manufacturing tin-plate.
10. Commercial sizes of tin-plate.
11. How galvanized iron is made, grades and qualities.
12. Commercial sizes of galvanized-iron sheets.
13. Source, use, and characteristics of copper.
14. Composition of brass, its characteristics and uses.
15. Sources, characteristics, and uses of aluminum.
16. Sources, characteristics, and uses of zinc.
17. Kinds and sizes of drills.
18. Kinds and sizes of rivets.
19. How to specify grades of tin-plate and galvanized iron.
20. Occupational information, including the success factors, wages, and opportunities in the industry.

III. Elementary Electricity for High Schools.

The field of electricity as a science is so vast, and its application in practice is so extensive and so intricate, that we can consider only a very small part of it. There are, however, certain very fundamental conceptions and practical applications which may be presented with profit to pupils of high-school age. When we go beyond these rather fundamental things in the high school the work is likely to take on the aspect of specialized vocational training. While vocational training is very desirable in the preparation for a specific vocation it is not a part of the industrial arts program.

The industrial-arts work should not be organized with a view of preparing the student for a specific electrical vocation. The time available should be spent in giving him as broad an understanding as possible of electrical theory and its practical application. In order to do this wisely it is necessary to have carefully selected electrical projects involving the principles we wish to teach.

Elementary electrical work contains very few learning units involving any considerable degree of manipulative skill. Most of the manipulative operations are very simple and readily learned. They involve such things as splicing wires, removing insulation, soldering, connecting to binding-posts, insulating, and the like, which, together with certain standard methods of construction, constitute the learning units involving doing. The more fundamental learning units involving the principles of flow and transmission of current, the characteristics of current, and the methods employed in making it serve our purposes are essentially matters of information and do not involve manipulative skill.

A clear understanding of just what we are trying to teach will add greatly to the value of such work in our schools. Boys can do many interesting things with the electric current, but these interesting projects should be the means of teaching certain fundamental principles of electricity. If we do not have these principles clearly in mind, we are likely to overlook them because of our interest in the more spectacular results of our experiment. The installation of a bell circuit involves certain mani-pulative skills, and certain problems of

construction, but these are only the more superficial learning units of the job. Such a task gives a safe, easy, and inexpensive means of teaching some of the fundamental ideas of the electric circuit, and the use of metallic conductors, as well as an application of the principles of electromagnetism.

The Learning or Teaching Units:

A. The Things You Should Be Able To Do:

1. To read a wiring diagram.
2. To make a wiring diagram.
3. To plan the procedure in doing a job.
4. To remove insulation or covering from wire.
5. To make a rat-tail splice.
6. To make a Western Union splice.
7. To make a tap splice.
8. To solder and tape a splice.
9. To attach wire to a binding-post.
10. To uncoil wire without twisting.
11. To attach a terminal to a wire.
12. To plan and run a simple bell circuit.
13. To plan and construct a bell circuit using one button and two bells in parallel.
14. To plan and construct a bell circuit using one bell to operate from two push-buttons.
15. To plan and construct a circuit in which one button operates a bell and the other a buzzer.
16. To plan and install a return call system using same batteries.
17. To detect and remove trouble in bell circuit.
18. To connect dry-cells in series.
19. To connect dry-cells in parallel.
20. To liven a dead dry-cells.
21. To construct an electromagnet.
22. To construct a transformer.
23. To install a transformer in 110-volt line.
24. To construct a simple buzzer.
25. To construct an induction coil.
26. To construct a simple motor.
27. To construct a heater.
28. To construct an extension cord for lighting.
29. To construct an extension cord for heater or other electrical equipment.
30. To install feed-thru switch in extension cord.
31. To test and replace fuses.
32. To plan and construct a simple lighting circuit, lamps in parallel.
33. To plan and construct a simple lighting circuit, lamps in series.
34. To wire an electric lamp.
35. To use a volt-meter.
36. To use an ammeter.
37. To calculate the resistance of a circuit using Ohm's Law.
38. To read an electric meter.
39. To construct a simple telegraph system.
40. To install a simple switch.
41. To install a flush switch.
42. To install a flush receptacle.
43. To determine the identity marks on a motor.
44. To administer first aid in case of shock.

B. The Things You Should Know:

1. The properties of a magnet and the characteristics of the magnetic field.
2. The source of electric current, or pressure.
3. The characteristics of the electric current.
4. How the electric current is conveyed.
5. Kinds of conductors and their uses.
6. Voltage.
7. The ampere.
8. The watt.
9. How the electric current gives power.
10. How the electric current gives light.
11. How the electric current gives heat.
12. The difference between direct current and alternating current.
13. The sources of direct current.
14. The source of alternating current.
15. The meaning of phase and cycle.
16. Resistance and its effect.
17. How the rheostat works.
18. The volt-meter.
19. The ammeter.
20. The electric meter.
21. Types of motors and how to identify them.
22. Types of transformers and how they work.
23. Types and purposes of condensers and how they work.
24. The three-wire system.
25. The construction of the dry-cell and how it works.
26. The construction of the wet-cell and how it works.
27. Kinds of fuses and their uses.
28. Kinds of electric lamps and how they are made.
29. Ohm's Law.
30. How the electric bell works.
31. Why splices should be soldered.
32. Cause and effect of short circuits.
33. Importance of proper insulation.
34. Sizes of wire.
35. The effect of an overload.
36. Symbols used in wiring diagrams.
37. Safety rules in working with electricity or electrical appliances.
38. Types of work and opportunities in the electrical industry.
39. Imperfections in housewiring which involve fire hazards or personal injury.

IV. Automechanics for High Schools.

There appear to be a very wide difference of opinion as to what units of instruction should be included in a course of automechanics for high-school boys. Some hold that it should cover only the minor adjustments and care, while others should have the work cover major repairs. These differences of opinion arise out of a lack of a common understanding as to the purposes of the work.

The primary purpose of a course in automechanics in the high school is not to teach boys to repair automobiles, as a vocation, but to teach them the fundamental mechanical principles involved in other machines as well as in the automobile. In addition, we wish to teach them how it operates, how to care for it, and how to make minor adjustments. When the instruction material is selected and organized on this basis it will be seen that it offers an opportunity far beyond the mere making of repairs and adjustments; and pupils may study with profit the construction and operation of mechanical parts which it would be unwise for them to attempt to repair or adjust on a car, as a matter of service.

The automobile is more widely used than any other machine, except, perhaps the watch and clock. It is important, therefore, that people know something of the principles upon which it operates in order that it may be used with greater satisfaction. Unfortunately, the automobile is more subject to defects in operation than the watch or clock; and for that reason the owner, or the prospective owner, should know something about the causes of the common failures, and how to care for the machine in order to prevent these failures as far as possible. Most cases of car failure during the first year or two are due to tinkering, or to failure to give the proper care to the car, because of a lack of understanding of the principles upon which it operates.

In some of our schools much time has been wasted in tinkering and making minor repairs when the time should have been used for a study of the fundamental principles of the machine. If we are to train one to use and care for the car intelligently, the instruction must be specific and systematic. In order to illustrate the fundamental things we wish to teach, the equipment must be sufficient and of the proper character. It should be permanent, and so arranged that it is available for instructional purposes with the least possible delay, and without any unnecessary, noninstructive labor. We can not depend upon friends or faculty members with obsolete models to furnish us with the kind of material needed for instruction, and to furnish it when it is needed. If we rely upon chance or accident to bring us our instructional material, the supply will be irregular, time will be wasted, and the boys will be required to do a vast amount of work for which they receive no educational returns.

We maintain schools for instructional purposes, and there is no virtue in doing a production job unless it contains the elements we wish to teach in some proportion to our needs. Production jobs are highly desirable under certain conditions, but it is better to give time to experimental and practice work, which is known to contain the things we wish to teach, than to spend time on repetitive work in production jobs after the processes have been thoroly learned. A "clinic" is highly desirable at times, but it should not be permitted to monopolize the time allotted for instruction in fundamental principles.

We must not overlook the fact that in the study of this machine a boy will have an opportunity to learn a number of things of value which are not confined to the automobile in their application. This will justify far more extensive work on the automobile than would be justified on the basis of the care and operation of such a machine. There are many fundamental mechanical principles involved, the applications of which are found in other machines, and the automobile offers an interesting opportunity for their study.

The list as submitted is not a list of the repairs a boy should be able to make, but a list of the experiences we should give him in order that he may understand some of the fundamental principles of machines, how to care for machines, and how to make minor repairs and adjustments on the automobile. The list would be much shorter if it were confined to the repairs which a boy might be expected to make.

The Learning or Teaching Units:

A. The Things You Should Be Able To Do:

1. To plan the procedure in doing a job.
2. To test and clean spark-plugs.
3. To clean and adjust breaker points.
4. To grease a car.
5. To change oil in engine.
6. To wash and polish a car.
7. To iron out dents or bends in fenders or body.
8. To retouch scratches or damage to finish.
9. To repack water-pump glands.
10. To replace water-manifold gaskets on Ford.
11. To clean gasoline lines.
12. To replace light bulbs.
13. To test and adjust lights.
14. To adjust valve clearance in L-head motors.
15. To adjust valve clearance in valve-in-head motors.
16. To remove sediment from radiator.
17. To test and care for a battery.
18. To adjust tension on a fan-belt.
19. To remove and replace a tire.
20. To repair puncture with cold patch.
21. To repair puncture with hot patch.
22. To insert boot in casing.
23. To align front wheels.
24. To inspect and adjust front-wheel bearing.
25. To test and correct lost motion in a steering mechanism.
26. To inspect and adjust a clutch.
27. To remove and inspect a floating rear axle.
28. To remove and inspect a semifloating axle.
29. To inspect and adjust the differential.
30. To adjust the mechanical brakes.
31. To adjust the hydraulic brakes.
32. To adjust main bearings.
33. To adjust connecting-rod bearings.
34. To scrape a bearing.
35. To time valves.
36. To grind valves.
37. To reface and reseat valves.
38. To trace lines of power from battery to engine for starting.
39. To trace lines of power from engine to battery for charging.
40. To trace lines of power from engine to distributor.
41. To trace lines of power from engine to wheels.
42. To inspect a vacuum-tank.
43. To inspect a fuel-pump.
44. To clean and adjust a carburetor.
45. To trace and test the lighting system.
46. To trace and test the ignition system.
47. To locate and repair a short circuit in the electrical system.
48. To locate an open circuit in the electrical system.
49. To test an ignition-coil.
50. To change the charging rate of generator.
51. To clean commutator.

B. The Things You Should Know:

1. The types and uses of anti-friction bearings.
2. What is meant by *camber*, *caster*, and *toe-in*, and how they affect the operation of the car.
3. The principle of the worm-gear and how it is applied to the steering-gear.
4. How the cam-and-lever type of steering-gear works.
5. How the planetary type of steering-gear works.
6. The different types of clutch and how they work.
7. The universal joint and how it works.
8. How the gear-shift transmission works.
9. How the planetary transmission works.
10. How the free-wheeling device works.
11. How the differential works.
12. The meaning of gear ratio and its effect on power and speed.
13. The different types of axles.
14. The different types of brakes and the principal characteristics of each.
15. The types of engine bearing and the reasons for using such bearings.
16. The kinds of pistons, type of rings, their purposes and characteristics.
17. The meaning of cycle in a gas engine.
18. The sleeve-valve mechanism and how it works.
19. How the vacuum-tank works.
20. How the fuel-pump works.
21. The purpose of the carburetor and how it works.
22. The necessity for proper lubrication and how it is accomplished.
23. How the starting-system works.
24. How the lighting-system works.
25. How the ignition-system works.
26. The meaning of gear ratio and its effect on power and speed.
27. Safety precautions in driving.

INTERNAL COMBUSTION ENGINES

Howard E. Degler, American Technical Society.

Price $2.00

This book discusses the most modern developments of internal combustion engines. It deals with the principles and mathematics underlying all such engines and discusses in detail the principles of the Diesel Type engines. This book is well illustrated and is a thoroughly up-to-date text.

Geo. K. Wells.

ELECTRICAL DRAFTING & DESIGN

McGraw-Hill Company

Calvin C. Bishop, E. E.

This book assembles an excellent collection of electrical symbols with clear explanatory notes as to their uses. Helpful data are given regarding residence wiring and artificial illumination.

The increased use of electrical installations make this book timely. It should be helpful to teachers of drafting and especially helpful to teachers of electrical drafting as well as teachers of electrical apprentices and related trade information.

MECHANICAL DRAWING BOOKS I. & II.

McGraw-Hill—1931

Horace E. Boggy

Mr. Boggy has developed a two book series in mechanical drawing with the possibility of four levels of assignment. Combinations of four levels of assignment could also be used.

Thus a student of exceptional ability can get a course commensurate with his superior talents.

The psychologist has recognized for some time the desirability of intensifying the work instead of promoting too rapidly, thus getting a student out of his social sphere.

The author has emphasized the use of freehand drawing which is commendable.

Occasional sheets are inserted to show present day applications of mechanical drawing in industry.

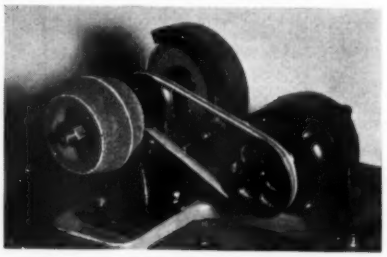
Probably the most unique feature of the two books is the plan of four levels of work. Which should make the texts attractive to a wide variety of mechanical drawing teachers.

NEW MOTOR-DRIVEN FARM GRINDER

A motor-driven grinder designed especially for all grinding work that occurs in farming is now available.

Prof. L. M. Roehl, of Cornell University, who designed the machine, aimed to produce a grinder for mowing machines, sickles, axes, scythes, disc harrows, drills, ensilage cutter blades, cold chisels, wood chisels, plane irons, draw shaves, cultivator shovels, butcher knives, shears, and all other grinding work that is now part of the farm shop work in departments of vocational agriculture in the high schools.

The grinding rig comes fully equipped with a beveled sickle grinding wheel, a 1 in. by 6 in. general grinding wheel and a 3/8 in by 6 in. saw gumming wheel. The 1/4 h.p. motor furnishes ample



power for the grinding jobs. Power is carried by a V belt, thus eliminating all belt troubles. Slotted holes in the grinder head base is a means of keeping the belt tight. Experience reveals that grinders that have the wheels on the motor shaft are not suited for grinding mowing machine sickles, axes, disc harrows, etc., because the motor is in the way. On the new grinder, the motor is placed back where it leaves the wheel free for all grinding work. A 10 foot cord makes possible to "plug in" at any socket or receptacle. The switch is in the grinder base where it is most convenient. Oil cups are provided for the bronze bearings. The bars of the tool rests are square and fit in square holes in the grinder head so that the tops of the rests are always in line with the centers of the stones. The grinder is completely assembled at the factory and ready to run by connecting the cord and turning the switch. It is made by the E. C. Stearns Co., Syracuse, N. Y., and sells for $22.50.

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each week in each of the cooperating cities. An arrangement for an itinerant instructor is easy for cities so well knit together by hard roads as those of the Fox River Valley, the Lake Michigan shore cities, and the Wisconsin River Valley. In cities not so conveniently situated, the "part-time" instructor takes the place of the "itinerant" instructor. The itinerant instructors employed at present by Wisconsin vocational schools, and the schools employing them, are as follows:

Name of instructor	*Name of Course*	*Cities Included in Circuit*	
H. G. Noyes	Adult Trade Extension	Appleton Cudahy Eau Claire Chippewa Falls Fond du Lac Green Bay Kaukauna Kenosha Kimberly La Crosse Beaver Dam Madison Wisconsin Rapids	Manitowoc Marinette Menasha Neenah Racine Rhinelander Sheboygan Stevens Point Superior Two Rivers Waukesha Wausau
D. S. Moser	Barbering	(First Circuit) Appleton Fond du Lac Manitowoc Neenah Menasha Sheboygan	(Second Circuit) Beloit Janesville Kenosha Madison
George Lischeske (Part-time)	Barbering	Beaver Dam Stoughton Watertown	
V. E. Anderson	Electricity	Beloit Fond du Lac Janesville Watertown	
Alwyn Jackman	Electricity	Marshfield Stevens Point Wausau Wisconsin Rapids	
W. G. Patterson		Cudahy South Milwaukee Waukesha	
Martin Wesolowski	Foundry	Beaver Dam Cudahy Fond du Lac Waukesha	
M. W. Smith	Foreman Training	Appleton Beaver Dam Cudahy Eau Claire Fond du Lac Green Bay Kenosha Manitowoc Wisconsin Rapids	Marinette Mosinee Racine Rhinelander Sheboygan Two Rivers Waukesha Wausau
Henry Elvers	Painting & Decorating	Sheboygan	
C. A. Hart	Painting & Decorating	Beloit Janesville Madison Watertown	

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CONFERENCE ON PRINTING EDUCATION

The Tenth Annual Conference on Printing Education, held at New York University, New York City, June 22-25, was the largest and best conference ever held in the interests of printing education. One hundred and ninety six were registered, consisting of printing teachers, supervisors of vocational education, and printers, from eighteen states, the District of Columbia and Canada.

The program was a varied one, making use of more than forty speakers, centering around the conference objective, "Closer Cooperation Between Education and Industry." The four major topics discussed were (1) "The Teacher —Keeping Himself Fit, Through Schooling, Reading, Professional Affiliations and Relations to the Industry"; (2) "Objectives in Printing Education"; (3) "New Developments in Education and Industry"; and (4) "Printing as an Art Appreciation Subject in the Public Schools".

A pleasing feature of the conference was the series of inspection visits that had been arranged as a part of the program. These include the Typographic Museum and Library and the plant of the American Type Founders Company, Jersey City, N. J., the plants of the Mergenthaler Linotype Company and the Intertype Corporation, Brooklyn; the Metropolitan Museum of Art, New York City, and typical schools of printing.

Three educational surveys had been conducted prior to the conference, the results of which proved rather definitely the progress that is being made in printing education. The first, 1931 Survey of Courses of Study, was conducted by Ralph A. Loomis, of the William L. Dickinson High School, Jersey City, N. J. Sixty-six departments of printing from widely separated schools of the country were represented. It was decided to continue this survey for next year's conference. The second had to do with physical facilities of printing education. Returns to the questionnaires were received from more than 600 departments of printing. The information was summarized by the printing students of the Carnegie Institute of Technology and the report was submitted by Professor David Gustafson, Head of the Department of Printing of that institution.

The third survey was an attempt to discover (1) the number of graduates from typical schools of printing; (2) the number that actually entered the industry; (3) the number that desire to enter; and (4) those seeking higher education in printing. Returns were received from 224 schools of printing. The number of graduates from these schools of all types was 9,239, of which number, 2,111 are already employed in the industry; 1,114 are planning to enter the industry; and 1,094 are seeking higher education.

It was decided to hold next year's conference at New York University again.

Charles Pagnucco	Painting & Decorating	Cudahy South Milwaukee Waukesha
R. F. Ryd	Painting & Decorating	Fond du Lac Green Bay Manitowoc Oshkosh
J. C. Yonk (Part-time)	"	Racine
M. M. Hanson	Plumbing	Appleton Fond du Lac Green Bay Oshkosh
F. O. Maeder	"	Kenosha Manitowoc Racine Sheboygan Two Rivers
A. J. Matthais, Jr.	"	Cudahy South Milwaukee Waukesha West Allis
Henry Pommerenck	"	Beloit Janesville Madison Watertown
A. W. Bouffard	Pulp and Paper	Appleton Green Bay Menasha
L. J. McNamara	" "	Eau Claire Mosinee Rhinelander Wausau Wisconsin Rapids

The itinerant instructor is usually employed by four cities and regularly spends one day a week in each. Part of the day is spent in the part-time school giving instruction to apprentices and day part-time school pupils in the community. The evening is usually devoted to a trade extension class for the adult workers in that industry. The making of contacts with the industry in each city is an important part of the work of the itinerant instructor. In order to determine accurately the needs of each trade in respect to standard training, the part which industry can play in this training and the part which the local vocational schools should play in order to supplement what industry is able to do, he has to take part in numerous conferences with local vocational school directors, with employer and employe groups, and with the local advisory committees, which consist of equal representation from employer and employe groups.

I believe that an extension of the itinerant vocational teacher plan during the next few years would be of decided benefit to the worker and to the industry of the state, provided that the extension is made along the lines which experience has shown to be necessary for success. This means, first, that the local director and the local board of vocational education accepts responsibility for fostering and developing the plan. This is now assumed in Wisconsin. Second, a trade competent and professionally trained teacher must be employed. Third, the place where the classes are conducted must be adequate in size and equipment. Fourth, the work of the teacher and the class must be supported by an advisory committee made up of representatives of journeymen and employers in the particular craft in which the itinerant teacher is working. Fifth, the course given must be adapted to the needs of the workers and approved by the advisory committee. Sixth, the sentiment of the community must support the work.

This set-up, from Wisconsin experience, is absolutely necessary to success. If this exists, the workers and their employers react favorably to the work. If any one of these conditions is absent, the reaction of one or both groups is pretty sure to be unfavorable.

The steady increase in enrollment in our evening school trade extension courses is one of the best indications of the attitude of the workers and employers toward this work. There are, of course, weak links in the chain. It is not easy to find trade teachers who are at the same time trade competent and professionally trained. The State Board of Vocational Education find it necessary to carry on teacher training continually from the state office on an itinerant basis. The local school does not always have suitable rooms and equipment. Many times local boards of vocational education have had to secure rented quarters. An advisory committee adds in many ways to the difficulties of the instructor because he has to please many, but it adds tremendously to the effectiveness of his work to spend time and energy in discussing his problems with this committee. It is not easy to adapt courses to meet the needs of the workers. It requires constant contact of the teacher with industry, consultation with the advisory committee and with the workers themselves; flexibility on the part of the teacher and willingness to take from his pupils as well as to give.

We can say truthfully that where the principles above are faithfully carried out, the workers and the employers both react favorably to it. Where there is any deviation from them, there is bound to be criticism and dissatisfaction. It is our task to try to make the practice throughout the state conform to the principles which has been proved successful.

It may be interesting to note that the enrollment in the Wisconsin part-time schools has steadily increased during the past decade, as is shown by the following figures:

	ENROLLMENT		
Year	Day	Evening	Total
1921-22	24,541	24,684	49,225
1922-23	26,665	25,845	52,510
1923-24	28,501	33,502	62,003
1924-25	31,335	33,651	64,986
1925-26	34,190	35,282	69,472
1926-27	34,962	36,214	71,176
1927-28	34,305	37,452	71,757
1928-29	34,170	43,757	77,927
1929-30	35,892	48,490	84,382

From these figures it will be seen that the adult evening school attendance doubled in the nine year period from September 1921 to June 1930. These figures do not show, however, all the adults who were actually in attendance in our schools. Many of our day pupils are adults in voluntary attendance. On this question we have never complied any general statistics covering the whole state. We know, however, that in one of our schools, Madison, the voluntary attendance in the day school is quite large. Adults come into the Madison school in the day-time, particularly for commercial training, but also for English, art, music, home economics, and trade and industry.

INFLUENCES OF EXPERIMENTS IN CONTINUATION EDUCATION ON THE FULL-TIME SCHOOL

G. C. Mann

Director of Vocational Education, Berkeley, California.

The outsider might gather the impression that continuation enthusiasts are setting themselves up as reformers and that as reformers we are claiming the credit for most that is good in

education and that we are the inspiring force in changing the conceptions of education.

But I am willing to say that continuation schools can not claim originality in the new conceptions and theories of education, but I do contend that continuation schools, unhampered by tradition, have been willing and able to plunge into the work of carrying out new aims and purposes without the great labor usually attending reformation and in so doing have been able to influence other schools and other forces in education to more readily accept and to practice the newer principles of democracy in education.

We can not claim that we have influenced all schools or that we are necessarily the pioneers in the work. Other forces before us and at the present have been and are working toward a scheme of education for living. I could name individual schools in this country that have made great contributions toward this end. But these schools have all been too few and the spread of their influence has been all too slow. It has been, I believe, the continuation school that has spread the new conception to many other individual communities and that the definite missionary work it has done has planted seeds that will grow.

The problem of continuation education has not been different from the fundamental problem of any other type of school. We have simply been trying to answer one question, "What should the student learn and how should he learn it?" Whatever we have done which may have helped other schools to answer this question has been done according to fundamental principles generally accepted by students of education.

The first is the principle of activity. People learn by what they do, as has been well said, "Experiences are not nouns to be viewed in scrap books. Experience is a verb. What the student does determines what his education really is."

In the part-time school the student is, in the very nature of things, having life experiences. His whole training is directly or indirectly based upon these experiences. We have talked a great deal about this and have brought forth many cases to show successful results, when school work was connected up properly with the job.

This talk has had some results. Recently a head of a high school commercial department said to me, "We are able to do just as much as you are in your continuation schools with practical training because we are making arrangements for our girls to do their office practice in actual offices. In this case I happen to know that his department was influenced by successful placements of girls from the continuation schools.

The second principle, perhaps the most revolutionary of all changes in educational theory, is the principle of *specific learning*. The old claim that schools could teach people to think, to strengthen memory, develop observation and train judgment has been discarded. When William James years ago discovered that by practicing memorizing he did not strengthen his memory, a host of experiments began. All of these experiments have shown that the more nearly the practiced situation resembles the situation in which the material is to be used, the greater the probability that some good will come from the practice. Whatever can be done by way of strengthening memory or developing thinking powers, habits of study and the like, can be done as well or better when the material is learned in the form and setting in which it must function in life. We are led inevitably to the necessity for making a curriculum of units which are worthwhile in themselves. To teach what is needed in the form in which it is needed is a principle on which we readily agree. This principle has been impressed on the minds of all school people. Everywhere you hear teachers trying to justify the specific values of their courses. You even hear many college professors talking of the immediate utility of their courses instead of talking about "reaching for the truth." But isn't it the part-time school that is setting the example and exhibiting the proof with results? What is needed and when needed is almost our fundamental creed. A month ago a group of high school commercial teachers from a neighboring city said to a coordinator in the Berkeley Continuation School, "We are grateful for that unit course in Comptometry. Our students are progressing more rapidly and they are more interested." These teachers were quite anxious to know how such a course was worked up. The coordinator could tell them at once that all non-essentials had been dropped, that it was a course with placement definitely in view, and that it had to be right. All the material that related to a job that you might have in ten years if you promoted rapidly enough was cut out. The material that was needed now was considered.

This illustrates another principle, that of *forgetting* and paired with that is the ability of *adults to learn*. We do not have to teach *now* all that the student may ever expect to use. As life makes additional demands upon them they can meet them as people do now, by additional learning. We know now that people can learn as well at forty as they can at fifteen.

The *readiness* to learn is another principle which we use to advantage. Regular full-time schools are learning that a boy has a very different attitude when he studies the operation of condensers in order to build himself a radio from that when he is assigned the same material in a few pages of physics. We have capitalized on that readiness to learn. We are either helping the student on the job or we are helping him toward a job which is in sight and desirable to him.

We have had some influence in helping to more generally establish these principles.

Continuation schools through successful experiments that have come to the attention of the public have influenced high schools to do the same thing in a more or less competitive spirit. Public approval of an experiment seems to be very effective in causing it to be taken up generally.

A little more than a year ago, the Oakland Continuation Schools extend ed their secretarial training courses so as to prepare select groups of girls for the better type of secretarial training. The experiment was a success. It was given on a real vocational basis and the students were placed in the better office jobs. The commercial head of a high school visited the school and found scores of his former graduates voluntarily attending this school and getting jobs they could not get from their high school training. He is now beseeching the superintendent to approve a post-graduate course in his own school so that he can give these more mature students placement training. Parents and the public want to know why his graduates must go to a continuation school to prepare for placement. He is influenced, and so others will be influenced by experiments the success of which is apparent to the public.

Continuation schools have in other ways modified the high school attitude toward employment and training for employment. Some full time pupils are now allowed to work and at the same time carry on regular high school work. Five years ago I requested a high school principal to allow a boy to leave school one period early to take a much needed job. This last period was a study period and I anticipated an affirmative answer. But not only was this permission denied, but all such future requests were discouraged. "Our school opens at 8:30 and closes at 3:15," said the high school principal, "and anyone getting credit here stays for those hours. The matter is not open for discussion." Today all kinds of arrangements are made in that school so that students may hold jobs. That change was a result of proximity to a continuation school and the conversion of the public to the "learn and earn philosophy."

I might go on with other illustrations, but I think some opinions of

some regular full time school people would be more interesting. When I was assigned this subject I realized that I could claim all that is good in education and assign all that is bad to some other type of school, but I was interested in what some full time principles thought about continuation school influence. I was surprised at some of their statements and some of their admissions. I think you will be, and I want to read a few excerpts from their statements.

One says, "The part-time and continuation schools have influenced the full-time school in the following respects: (1) They have brought about more vocational guidance in the public schools. One of the most frequent forms of administering guidance is the course called "Occupations". (2) They have tended to bring about an increase in the number of counselors in public schools. (3) Many of the extra-curricular activities of schools now involve vocational activities; there are vocational guidance clubs, printing clubs, and many others. (4) They have been an important factor in bringing about greater flexibility in the full-time school curriculum, getting away from the idea of strict adherence to the traditional school organization and content. (5) They have tended to bring about a more sympathetic attitude on the part of regular full-time teachers regarding vocational training as a form of education."

Somehow these catalogues of influences sound better when made by the full-time people than when we make them ourselves. There is a lot of satisfaction in getting what I would term, in view of original attitudes, as admissions.

Another letter says, "The full-time school has been influenced by the part-time continuation schools in that the leaders in an effort to retain thousands of boys and girls who yearly drop out of school have adopted new practices and subjects similar to those adopted by the part-time schools—mark the widening field of school activities. The old type of full time school contented itself with giving its pupils mental drill and such an amount and variety of useful information which was of direct practical aid to about ten per cent of the pupils only. The new idea as exemplified by part-time education seeks to do all of this but in addition reaches out a helping hand to the remaining ninety percent of its pupils and by means of vocational education fits them for an active career. Full-time schools due to the influence of part-time continuation schools likewise tend to eliminate some of the educational reasons given which cause boys and girls to drop out of school, such as failure to get a certain type of training offered, and a desire to obtain a particular type of training such as was not offered in the full-time school."

Another says, "Part-time continuation schools have made the program of the full-time school more flexible. They have stimulated the formulation of courses that fit into the every day life to a larger degree. The main influence, I believe, is the growing feeling of good will towards work other than formal education—a more democratic feeling and a broader vision, with the resulting aims and methods that bring the work in the full-time schools closer to the experiences and needs of the child."

Another states the influence of the continuation school in the following manner: "Continuation education has had, I believe, some rather striking influences on regular education and will probably have even more in the future. In this phase of education teaching students rather than subjects was first really developed. Regular education is following the lead of vocational education in trying to analyze the needs of the students and plan the work to fulfill these needs. The findings of the continuation school has done much to increase the flexibility of the regular high school program. When the continuation teachers felt that many of the students were there because they could not get what they wanted in regular high school or because they were forced to take subjects which they did not like, this information eventually got to the administration; courses emphasizing practical aspects worked out on the project basis have consequently been included in many schools."

Another letter says, "Part-time schools have influenced full time schools in that they have effectively brought to the foreground the need for vocational education as definite values and benefits for the individual concerned. This knowledge of the importance of vocational education has brought about the inclusion of more vocational subjects in the full-time school. There is also a tendency to make these courses direct and specific with definite aims, values, and standards in order to have an efficient checkup. Terminal courses have also been considered and even included in some curricula. There will also probably be an effort on the part of full-time schools to get away from tradition and pay heed to new ideas. Even in academic subjects there is a desire to have definite aims and standards and also to know the competency there. In some cases vocational methods are used. Anyway, the schools tend to become more elastic, more for the pupils and less for the system. The part-time school has in this way acted as an instigator of reform in the full-time school."

Another letter goes on to say, "That the continuation school has met with some degree of success is demonstrated in the increased enrollment in California—6,965 in the school year 1921 to 25,706 in the school year 1928-29. As these workers grow into adulthood, the influence of the continuation school will be more widely felt, enrollment will continue to increase until the point of physical saturation of the existing schools is reached. Either one of two things will then have to transpire. Additional continuation schools will have to be instituted with a definite line of demarcation between the continuation and the general school or the responsibility of a like service will be thrown back upon the general high school. I am inclined to believe," he goes on to say, "that when such demands are made, when adjustments have placed the methods and results of the continuation school beyond the experimental stage, the high schools will have to recognize their problems and meet the needs by providing a curriculum for the lower ninety percent as well as the upper ten percent of their students."

Finally one principal attempts to list the changes in the policies of the full-time school due to the continuation school. He says, "The attitude of the teachers toward the students who would soon become workers has been changed so that the policy of looking down on the student who could not have a college education is disappearing (although too slowly). (2) Education has become a serious business in which the maximum social return is expected. The full-time school has had to change many of its policies in order to justify itself. (3) The future of the pupil is given more consideration, guidance has been attempted and although it has often failed, the spirit of service to the pupil has been in evidence. (4) Provision is being made for individual instruction instead of expecting all the students to fit into one mold. The varying needs of the pupils are given consideration. (5) Objectives are becoming more flexible so as to take care of the varied needs of the pupils. (6) Better cooperative relations have been established with the community and not with just a part of it. Of course this cooperation is absolutely essential to the continuation school, but the other schools have seen the advantage. (7) The new policy of service where needed has taken the place of the policy of a certain kind of service restricted to certain people by the ideas of individuals. (8) The policy of regarding the schedule as leading the education activities has been superseded by the policy of expecting a schedule to originate from the activities. (9) The sacredness of the curriculum has been challenged and much to the surprise of many principals, courses have been changed without wrecking the schools."